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ABSTRACT

Technical reports of individual Title I project evaluations conducted during the 1974-75 school year are contained in this annual volume. It presents information about each project's rationale, expected outcomes, mode of operation, previous evaluative findings, current implementation, and attainment of its objectives. Projects included are: Affective Education, Benchmark, Bilingual Education, Communications Experiences, Comprehensive Mathematics, Comprehensive Reading Project, Computer-Managed Instruction, Counseling Services, Creative Dramatics, Education in World Affairs, English as a Second Language--Readiness, English to Speakers of Other Languages, Enrichment Activities for Hearing-Impaired Pupils, Episcopal Academy: Summer Enrichment, Follow Through, Institutions for Neglected and Delinquent Children, Intensive Learning Center, Itinerant Hearing Service, Learning Centers, Meet the Artist, Motivation, Multimedia Center, Out-of-School Sequenced Science Experiences, Pennsylvania Advancement School, School-Community Coordinator, Speech and Hearing, Speech-Therapy Clinics, Summer Special Education, Walnut Center, and Young Audiences. (Author/BW)

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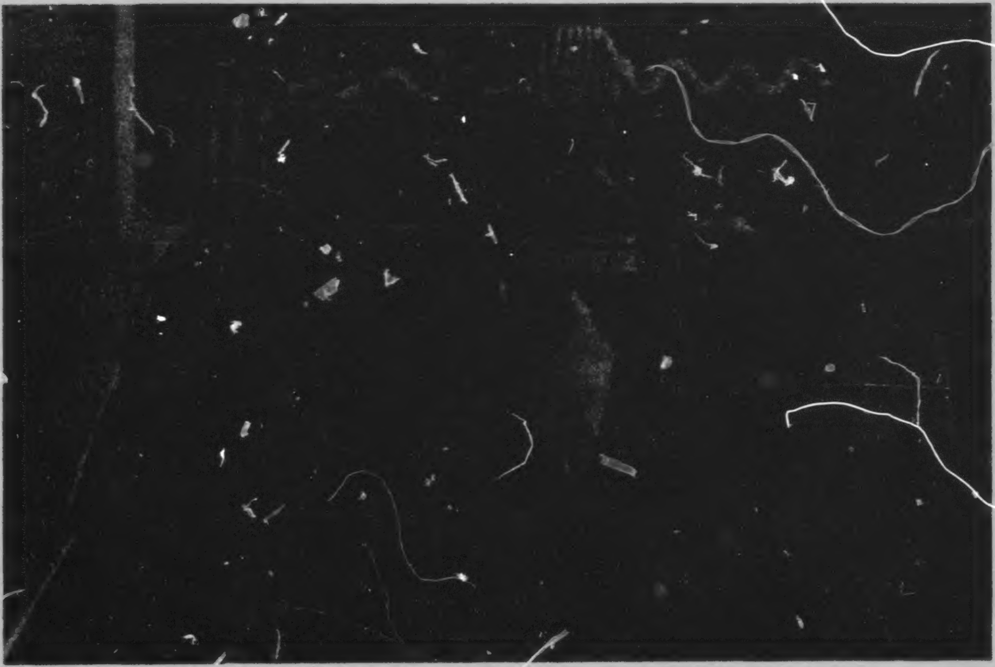
Technical Reports



DEPARTMENT OF FEDERAL
EVALUATION RESOURCE SERVICES

TM005 612

OFFICE OF RESEARCH
AND EVALUATION
THE SCHOOL DISTRICT OF PHILADELPHIA

Report #7606

EVALUATION OF TITLE I ESEA
PROJECTS, 1974-1975:
Technical Reports

An annual report issued by the Department of Federal Evaluation Resource Services, evaluating projects funded under Title I of the federal Elementary and Secondary Education Act. (Abstracts of these technical reports comprise Report #7605.)

November 1975

Office of Research and Evaluation
THE SCHOOL DISTRICT OF PHILADELPHIA
Philadelphia, Pennsylvania 19103

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This report was prepared by the Department of Federal Evaluation Resource Services. Assistance in evaluation design, instrument development, data analysis, and editorial matters was provided by the Division of Instructional Research and Development Services, Edward K. Brown, Director. Members of the project-evaluation teams are named in the Appendix.

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PREFACE

This volume contains the technical reports of individual Title I project evaluations conducted during the 1974-1975 school year. It contains extensive information about each project's rationale, expected outcomes, mode of operation, previous evaluative findings, current implementation, and attainment of its objectives. In addition, the reader will be able to gain insight into the extensive evaluation activities that are intimately linked to each project.

Comprehensive evaluations have revealed that over the past 10 years Philadelphia's Title I projects have enabled administrators and teachers to create favorable learning environments, have reversed some of the historic trends toward drastic pupil underachievement, and have increased parental participation.

Evaluations required under Title I have given administrators an opportunity to discover and choose among alternative methods of improving instruction. It is hoped that the knowledge gained by systematic evaluation will be used to continuously upgrade the quality of services provided to target-area children.

Stephen H. Davidoff

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*Separate technical reports on Alternative Programs and on each of the District Reading Projects are issued annually by the Office of Research and Evaluation's Department of Priority Operations Evaluation Services. Although these projects are not treated in the Title I Technical Reports, they are included in the briefer volume of Title I Abstracts.

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AFFECTIVE EDUCATION

The Affective Education project (AEP) has two major components: resource services and the communications network. The resource-services component offers target-area School District personnel and parents training in the use of affective curricula and specific affective teaching techniques to enhance basic skills learning by improving self-image and attitude toward school and by increasing student responsibility in learning. The communications-network component has developed and disseminated, through a long-term sequence of workshops with parents and teachers, new curricula, techniques, and approaches that integrate reading, writing, speaking, and listening, and that help children avoid or overcome failure patterns and blocks to learning basic communication skills.

RATIONALE

AEP attempts to meet the needs of teachers, students, and parents through development of new curricula and teaching techniques, creation of more humanistic classroom climates, prevention and removal of psychological blocks to learning, and provision of a resource center, in-service courses, and teacher and parent affective training.

The specific problems or needs which affect or otherwise pertain to teachers include (a) difficulty in developing and applying curricular and teaching approaches which prevent or decrease blocks to the learning of communication skills, (b) an expressed sense of isolation in their work, (c) an expressed sense of frustration, (d) an expressed sense of role insecurity, (e) a loss of personal autonomy, (f) difficulty in developing life-relevant curricula and teaching techniques, and (g) a relatively high turnover rate.

The specific problems or needs which affect or pertain to students include (a) poor achievement in school subjects, especially communication skills, as indicated by scores on standardized achievement tests, (b) difficulty in relating course content to their personal lives, (c) low secondary school retention, (d) chronic absence and lateness, (e) negative acting-out behaviors, (f) expressed feelings of a lack of identity and a lack of control over one's personal life and environment, and (g) a dislike for school.

The specific problems or needs which affect or pertain to parents include (a) expressed desire to support and augment their children's learning, especially reading, writing, listening, and speaking, (b) belief that school does not serve the real needs of their children, especially in the upper grades, and (c) expressed feelings of alienation toward "schooling".

EXPECTED OUTCOMES

AEP is designed to provide introductory workshops, in-service courses, and communications-network training programs for school personnel and parents. The development and dissemination of process-oriented curricula, and the establishment or maintenance of affective target schools or units within target schools are additional anticipated outcomes of the project.

It is anticipated that students who receive most or all of their instruction from teachers who have participated in resource-services or communications-network training sessions will maintain or improve reading skills, evidence increased school attendance, acquire fewer disciplinary referrals, improve their attitudes toward school and learning, and evidence positive attitudes toward their teachers and peers.

MODE OF OPERATION

The project attempts to improve the personal and academic development of students through concentrated staff development for teachers in (a) techniques and curricula which convert passive lessons to active, experiential lessons, (b) development of curricula in which academic content and skills are taught in ways that capitalize on student interests and concerns, (c) development of strategies for increasing the students' verbal participation in their academic program, (d) use of peer and cross-age tutoring, (e) development of new organizational patterns and teaching techniques which foster personalized learning, and (f) use of curriculum projects and process techniques to remove psychological barriers to the learning of basic skills.

Ongoing support groups and supplementary training for School District personnel are additional operational components of AEP. The provision of support for teachers who have received AEP training involves a variety of approaches such as after-school meetings, classroom observations by peers and affective trainers, outside meetings with consultants, maintenance of a materials resource center, and weekend leadership-training conferences. Communications-network training sessions focus on assisting teachers in creating classroom conditions that help students build positive associations, histories of success, and realistic expectations of self in learning to read and write.

PREVIOUS FINDINGS

During the project's initial years of operation (1968-1970), efforts were concentrated on the development of appropriate curricular materials and training procedures. In comparing project students with other students, results of formative, internal evaluations suggested that affective students understood themselves better, were able to generate more solutions to problems, and were able to use more explicit language in describing their feelings.

In 1970-1971, affective students were found to attend school more frequently and to have fewer discipline referrals than a comparison group of students. The Climate-of-This-Class Survey distinguished significantly ($p<.005$) between affective and comparison students; affective students reported more frequently than comparison students that their classes generated group feelings and cooperation among students and teachers, were enjoyable, and offered an appropriate amount of freedom. A semantic differential survey revealed that AEP students had more positive attitudes toward themselves, their teachers, and their classes than did students in the regular school program.

In 1971-1972, questionnaire and survey instruments were administered to participating teachers and students. The teachers indicated that they felt they were dealing with disciplinary matters more constructively than before their participation. Students reported that they felt they had improved in academic achievement and had acquired more positive feelings about school.

In 1972-1973, when compared with non-AEP students, affective students in the middle school showed significantly ($p<.05$) greater improvement in reading achievement, and had only one third as many latenesses and half as many absences. Of the first-year participants in the high school affective program, 61% attained higher grades in English, and 51% did better in social studies than they had done during the previous year. These students also evidenced higher attendance rates as first-year participants in AEP than in the previous school year.

In 1973-1974, affective students did as well as or significantly better than nonaffective students in reading comprehension and vocabulary on the California Achievement Tests (CAT). A semantic differential survey revealed that high school affective students attained significantly higher scores than comparison students regarding their attitudes toward school. No significant difference was found between the scores of affective middle or elementary students and comparison groups in the same school regarding their attitude toward school. No significant difference was found between the self-concepts of affective and nonaffective students on the Piers-Harris Measure of Self Concept.

Affective students attended school significantly more often than comparison students at the secondary and intermediate levels, but not at the elementary level. Affective students had significantly fewer disciplinary referrals than comparison students.

Sixty-three percent of the affective students at the high school level gained one or more letter grades over their previous year's grades in history; 59% made similar gains in English. Forty-six percent of the affective middle school students gained one or more letter grades over their previous year's social studies grades; however, only 24% showed similar gains in English. At the elementary level, 83% of the affective students gained one or more reading-book levels as measured by an informal reading inventory (IRI); 61% gained two or more book levels.

Systematic classroom observations revealed that 67% of the sample affective teachers utilized affective techniques to relate academic content to student concerns three or more times during five observations. During these five observations, 95% of the teachers used one or more interdependence-grouping techniques, and 86% showed a cumulative utilization of five or more affective techniques designed to foster positive relationships that facilitate learning.

More than 1,000 teachers and 200 parents received affective training; 56 high school teachers received in-depth staff development.

THE 1974-1975 EVALUATION

Beginning with 1973-1974, evaluations have been conducted by the Office of Research and Evaluation. The current year's evaluation focused on five major areas students' achievement, attitude, attendance, and behavior; teachers' use of affective techniques; development and maintenance of affective target schools or units; development and application of communications-network curricula and teaching techniques; and provision of affective training for school personnel and parents.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. AEP records showed that the resource-services component provided staff development to 1,241 teaching, administrative, supervisory, and paraprofessional personnel in Title I schools. In addition, staff in other special programs received training and consultation through AEP resource services. Topics presented in the training sessions included conflict resolution, setting classroom boundaries, magic circle, active listening, "I" message, role playing, interdependence, and encouragement of listening and speaking.

The resource-services component also provided parent education; more than 300 parents attended two- to four-hour workshops and in-depth family-education programs. Project staff led workshops at two district conferences for parents, educ tors, mental health personnel, and community leaders.

Curriculum and information dissemination also occurred during the 1974-1975 school year. A family-studies course was developed and offered at the School for Human Services, and affective adaptations were made to published lessons in the "Man a Course of Studies" curriculum. Additional information about the project was disseminated in two issues of a newsletter, distributed to Title I schools. An affective education resource center, containing books, curricula, films, audio-visual materials, workshop space, and research monographs, was utilized by more than 300 Title-I-involved individuals.

The project's communications-network component provided training for teachers, reading aides, and parents. AEP records showed that 85 hours of training in basic skill development were provided to elementary and secondary teachers from October through June. Trainees were taught to recognize factors that affect learning the communication skills. They also learned specific communications-network techniques which integrated reading, writing, speaking, and listening skills to help students overcome blocks to learning language skills.

While exploring issues related to communication-skill learning, the communications-network training offered teachers a variety of affective techniques and specific curricular approaches. After teachers selected curricular approaches, AEP staff assisted them in developing appropriate materials and implementing them in the classroom. In all 20 observations by the evaluator, the curricular approach selected by the teacher was being implemented in the classroom. Informal interviews with eight teachers revealed that all were enthusiastic about their preparatory training, curricular approaches and materials, and follow-up training.

AEP records indicated also that a minimum of 50 reading aides attended two six-hour training sessions in May and June.

ATTAINMENT OF OBJECTIVES

Resource Services

Objective 1 (Applies to Tilden Middle School, School for Human Services [SHS], and Gratz High School): Students in full-time affective classes will do as well or attain significantly higher ($p<.05$) reading achievement than a comparison group of students in nonaffective classrooms in the same or parent school, as measured by the California Achievement Tests' Reading Vocabulary and Reading Comprehension subtests.

This objective was attained.

In February 1975, the period of districtwide testing, California Achievement Tests (CAT) were administered to samples of students in full-time affective classrooms at Tilden Middle School, Gratz High School, and the Bartram-affiliated

School for Human Services. Reading vocabulary and comprehension scores were compared with those of a comparison group of students in nonaffective classrooms at Tilden, Gratz, and Bartram.

Comparison students were selected on the basis of teachers' estimates of comparable reading levels. The same samples were used throughout the evaluation; however, sizes changed due to attrition, transfers, or absences at various times of the year. The sample sizes for comprehension comparisons were these: Tilden, 94 affective and 88 nonaffective; SHS/Bartram, 88 and 101; Gratz, 77 and 108. The sample sizes for vocabulary comparisons were these: Tilden, 95 affective and 80 nonaffective; SHS/Bartram, 88 and 101; Gratz, 76 and 108. A two-tailed t test was used to assess significance of the difference between mean scores of affective and comparison groups.

At Gratz, vocabulary mean scores were 654 for the affective group and 579 for the comparison group ($t = 3.80$, $df = 182$, $p<.05$); comprehension mean scores were 578 (affective) and 508 (comparison) ($t = 4.55$, $df = 183$, $p<.05$). Thus, in both test sections, project students performed significantly better than the comparison group.

At Tilden, affective students scored significantly higher than the comparison group in comprehension but not in vocabulary. Mean scores in vocabulary were 422 (affective) and 415 (comparison) ($t = 1.24$, $df = 173$, $p>.05$); mean scores in comprehension were 508 (affective) and 444 (comparison) ($t = 2.22$, $df = 180$, $p<.05$).

At SHS and Bartram, there was no statistically significant difference between mean scores of the affective and comparison students on either test section. In vocabulary the scores were 506 (affective) and 496 (comparison) ($t = 1.25$, $df = 187$, $p>.05$); in comprehension the scores were 516 (affective) and 507 (comparison) ($t = 1.08$, $df = 187$, $p>.05$).

Thus, the objective of having students in full-time affective classrooms perform at least as well in reading (vocabulary and comprehension) as a comparison group was attained.

Objective 2 (Tilden, Gratz, and SHS): The mean attendance of students in full-time affective classrooms will be significantly higher ($p<.05$) than the mean attendance of a comparison group of regular students from the same or parent school.

This objective was partially attained. In only one of the three school populations sampled was the difference between attendance rates of affective and nonaffective students statistically significant.

The evaluator collected monthly attendance figures from September through February for samples of affective and nonaffective students at Tilden, Gratz, and SHS/Bartram. The samples sizes were these: Tilden, 97 affective and 96 nonaffective; Gratz, 121 and 158; and SHS/Bartram, 96 and 126. The mean number of days absent was determined for each of the six groups.

A t test showed a statistically significant difference between SHS affective students (14.7 days absent) and Bartram nonaffective students (21.2 days) ($t = 2.51$, $df = 220$, $p < .05$). There was no significant difference between Gratz affective (17.8 days) and nonaffective students (19.8 days) ($t = .92$, $df = 227$, $p > .05$). There was no significant difference between Tilden affective (13.9 days) and nonaffective students (12.4 days) ($t = .70$, $df = 191$, $p > .05$).

Objective 3 (Bartram High School and SHS): Teachers in full-time affective classrooms will receive significantly higher ($p < .05$) student evaluations than a comparison group of teachers from the same or parent school, as measured by the Purdue Teacher Evaluation Scale.

This objective was not attained.

The Purdue Teacher Evaluation Scale (PTES) contains 60 items forming six subtests. The PTES was administered by the evaluator in March 1975 to students in five affective SHS classes and five nonaffective Bartram classes. Teachers of the nonaffective classes were selected from a list of volunteers. The nonaffective teachers were matched to five volunteer affective teachers by similarity of subject matter taught, age, sex, and years of teaching experience.

Six separate median tests were used to assess the significance of differences between affective and nonaffective students' responses on each of the six subtests. The number of teachers in each group who were rated above the 10-teacher median on each subtest is shown in Table 1. Affective teachers received higher ratings than nonaffective teachers in five of the six subtests. After the alpha level was adjusted (by dividing the .05 level by six) no statistically significant difference was found between ratings for affective and nonaffective teachers on any of the subtests.

Objective 4 (Gratz): Students in full-time affective classrooms will attain significantly higher ($p < .10$) scores when reporting their attitudes pertaining to (a) instruction, (b) authority and control, (c) interpersonal relationships, (d) learning, (e) school social structure and climate, (f) peers, and (g) general attitude toward school, than a comparison group of nonaffective students, as measured by the School Sentiment Index.

This objective was not attained. The evaluation instrument was the School Sentiment Index (SSI), containing 83 items forming five subscales (teacher mode of instruction, authority and control, and interpersonal relationships; learning; school structure and climate; peer relations; and general attitude toward school).

The SSI was administered by the evaluator in May 1975 to 130 students in three affective and three nonaffective classes at Gratz High School. Five separate t tests were used to assess differences between the responses of affective and nonaffective students on each of the five subscales. The alpha level was adjusted by dividing the .10 level by 5. No statistically significant difference was found on any of the five subscales or on the test as a whole.

Objective 5 (Gratz): Fifty percent of the teachers will use affective experiential techniques at least three times during five 40-to-60-minute, nonconsecutive class observations between November 1 and May 1. These affective techniques include magic circle, role playing, gaming, fantasy, physicalization, process questioning, I-message, open-ended questioning, and active listening.

This objective was attained.

Five nonconsecutive observations were conducted in classrooms of each Gratz affective teacher between January 2 and May 1. A project-specific observational checklist, developed by the evaluator, was used to record the number and types of affective techniques used by each teacher.

Seven affective teachers were observed in 35 evaluator visits. The number of affective techniques used by each teacher is shown in Table 2. Every observed teacher used at least three affective techniques.

Objective 6 (Gratz): The mean discipline of students in full-time affective classrooms will be significantly lower ($p < .05$) than the mean discipline of a comparison group of students in the same school between January 2 and June 1.

This objective was not attained.

The numbers of discipline referrals for 108 affective and 154 comparison students were collected from school records. Because of schedule problems, the months of September through February were substituted for the months cited in the objective. Chi-square analysis indicated no significant difference between the discipline-referral rates for the two groups (chi-square = 4.37, df = 3, $p > .05$).

Objective 7: Fifty percent of all students attending SHS will (a) voluntarily participate in a job practicum of at least four months' duration during the 1974-1975 school year, (b) satisfactorily complete that practicum as indicated by a letter grade of "C" or higher, and (c) evidence an attendance rate of 75% in the practicum seminar/workshops.

This objective was attained.

SHS personnel recorded the percentage of students completing a four-month job practicum with a grade of "C" or better and an attendance rate of 75% or better. Data were compiled for the first (September through January) and second (February through May) semesters.

Of the 188 students on roll at the end of the first semester, 163 (87%) voluntarily participated in a job practicum. Students attaining a "C" or better numbered 130 (69%). Students with at least 75% attendance in the practicum numbered 106 (56%).

Of the students on roll at the end of the second semester, 143 (79%) voluntarily participated in a job practicum. Students attaining a "C" or better numbered 118 (65%). Students with at least 75% attendance in their practicum numbered 119 (66%). Thus all parts of the objective were surpassed in both semesters.

Objective 8: Fifty percent of surveyed graduates of SHS (1974 class) will be either (a) in college or other formal postsecondary preparatory institution pursuing studies leading to a human service career, (b) working and/or volunteering in a human service career, or (c) in the military service assigned to a human service division.

This objective was not attained. Possibly the 50% criterion was unrealistic.

An evaluator-designed questionnaire asked if graduates were involved in a human service area by pursuing postsecondary studies, by working or volunteering, or by assignment. The questionnaires were mailed in December 1974 to 47 graduates in the Class of 1974 and 65 graduates in the Class of 1973. Seven additional 1974 and twelve 1973 graduates had no known place of residence and could not be contacted. Since slightly fewer than 20% of all surveyed graduates returned questionnaires, a follow-up telephone survey was conducted in January and February in an attempt to contact every graduate. Thirty-three graduates or their families (70%) of the Class of 1974 and 31 graduates or their families (47%) of the Class of 1973 were finally contacted.

Of the 33 surveyed 1974 graduates, nine were majoring in a human service area in college. One 1974 graduate was working in a human service area, and another was in the military assigned to a human service component.

Of the 31 surveyed 1973 graduates, nine were majoring in a human service area in college. Two 1973 graduates were working in a human service area, and none was assigned to a human service component in the military.

Thus, 33% of the responding 1974 graduates and 36% of the responding 1973 graduates were involved in a human service area.

Objective 9 (Tilden): "Affective Corridor" students, teachers, and parents will develop a sense of affiliation and interdependence within the corridor, as indicated by (a) development of a monthly corridor newspaper to which 25% of the corridor students contribute, (b) the offering of at least six corridor minicourses consisting of at least eight class periods each during the school year attended by 50% of the corridor students, (c) establishment of a corridor paperback library consisting of at least 200 volumes by January 1, and (d) involvement of at least 25 parents in each of three corridor social/educational events planned for October, December, and May.

This objective was attained.

The evaluator made five observations of the Tilden Middle School affective corridor and viewed reports by the affective corridor teacher coordinator. There were nine full-time affective teachers and approximately 245 students in the corridor.

The corridor newspaper was issued monthly, and occasionally two newspapers per month were produced. Teachers' records indicated that 20% of corridor students regularly contributed to the newspaper, and at least 50% of the remaining students made less-frequent contributions.

Ten special-subject minicourses were offered every Friday, for 60 to 90 minutes: art, library study, creative dramatics, patchwork-handsewing, tie dye, girls dance/exercise, games, movies, chess, and square dance. Students selected minicourses on a first-come, first-served basis, and then rotated to attend several options. All affective corridor students participated in minicourses during the school year.

A portable paperback library, consisting of approximately 375 volumes, was established by January 1. Observations revealed that the library was used for minicourse study, and for supplemental, tutorial, and silent-reading programs.

Records submitted by the affective corridor staff before the end of May indicated that three parent meetings had occurred and a fourth was planned for June. At least 25 parents attended each meeting (October, December, March), where topics included affective education and parent-child relations.

Objective 10: Short-term in-service training and workshops will be provided: (a) 50 district supportive staff persons will participate in a minimum of six hours training each; (b) 75 parents and a minimum of 200 Philadelphia educators will participate in a minimum of two hours of training or workshops each; (c) a combination of teachers, parents, and students totaling 200 will participate in a minimum of two 3-hour workshops offered during the 1974-1975 school year.

This objective was substantially attained.

AEP records revealed that 51 district staff members--26 from District 4 and 25 from District 3--received a minimum of six hours of affective training each. This exceeded the criterion of 50 participants.

Records also showed that 122 parents (as of April) and 1,107 educators (as of June) received a minimum of two hours of training each. This exceeded the criteria of 75 parent and 200 educator participants. Of the educators who participated in workshops, 36% received more than the minimum two hours of training.

The same records revealed that 200 participants--parents, teachers, and children--attended a four-hour workshop emphasizing parent-child communication. (The project director had decided that one four-hour workshop would be sufficient to provide all relevant experience.)

Objective 11: A minimum of four support groups consisting of six people each will meet no less than two hours, six times a year. These groups might include but are not limited to district supportive staff personnel, alternative elementary teachers, cross-age tutoring-program leaders, target-school teachers and directors, parents, and alternative school leaders and trainers.

This objective was attained.

The evaluator observed three support-group sessions. In addition, AEP records identified support groups, number of participants, and number of training hours received by each group. The alternative teacher group had nine participants and received 24 hours of training; leadership training group, 17 participants, 30 hours; Peirce School group, nine participants, 20 hours; Jackson School, six participants, 14 hours; Belmont School, 12 participants, 24 hours; Harrington School, 12 participants, 16 hours; Gratz High School, eight participants, 56 hours.

Objective 12: A journal of approximately 100 pages pertaining to interdependence will be developed and available to all Philadelphia Title I schools by June 1.

This objective was partially attained.

The Interdependence Journal was developed and was reviewed by the evaluator. It became available for distribution in September. The delay in the printing of the journal was due to the School District's temporary freezing of Title I funds during litigation (Nicholson vs. Pittenger et al.).

Objective 13: The Together Book will be developed by June 1.

This objective was attained.

The Together Book and a teachers' manual were developed. On-site observations by the evaluator indicated that The Together Book was used in at least six Title I schools, and AEP reports indicated that the book was used in additional schools.

Communications Network

Objective 14: Twenty elementary/junior high school teachers from schools participating in the communications-network component will make a commitment to become participants in the network, as indicated by their attendance at 20 hours of training.

This objective was attained.

Evaluator observations and AEP records indicated that 85 hours of communications-network training were offered to 26 elementary-level (including some junior high) teachers from October through June. All these teachers attended more than 20 hours of communications-network training. These data are summarized in Table 3.

Objective 15: Twelve secondary school teachers will participate in the communications network, as indicated by their attendance of at least 10 hours of training.

This objective was partially attained.

Evaluator observations and AEP records indicated that 85 hours of training were offered to 14 secondary teachers from October through June. Eleven (not 12) of these teachers attended more than 10 hours of communications-network training. These data are summarized in Table 3.

Objective 16: Fifteen or more elementary and six or more secondary teachers will implement communications-network teaching strategies to reading or writing for a minimum of six weeks, as indicated by an external evaluator's monitoring of questionnaires, AEP trainer observations, support-group records, and anecdotal records.

This objective was attained.

AEP records and the evaluator's classroom observations during March, April, and May indicated that 22 elementary and six secondary teachers implemented communications-network curricular approaches in their classrooms for a minimum of six weeks. In addition, one elementary counselor implemented an affective project for a minimum of six weeks. Durations of the various projects are summarized in Table 4.

Objective 17: In at least one school, 10% of the participating parent group whose children are in primary-grade network classrooms will make long-term commitments to become participants in the communications network, as indicated by their attendance at 10 hours of training and support-group meetings.

This objective was attained.

AEP records indicated that 120 children participated in communications-network classes at the Lea School. Twenty-four parents, representing 22 students, participated in communications-network training sessions. The parents of 19 children (16%) attended a minimum of 10 hours of communications-network training. Thus, the 10% objective was surpassed.

Objective 18: Fifty percent of the parents identified in Objective 17 will engage in at least three communication-skills-development exercises per week over a period of seven weeks, as indicated by an external evaluator's monitoring of interviews, questionnaires, anecdotal records, or written assignments.

This objective was attained.

AEP records indicated that 13 of the 24 parents participated in three communications network exercise rituals per week for seven weeks. Eight of the 13 submitted completed materials indicating that they participated in 21 daily 15-minute rituals, which engaged parents and children in listening, speaking, reading, and writing. Thus the objective of involving 50% of the parents was surpassed.

Objective 19: Fifty percent of third-grade children in network classrooms will increase one book level in a school year, as measured by pretest and posttest scores on a group informal reading inventory.

This objective was attained.

The IRI was administered by students' regular classroom teachers, with supervisory consultation by the school reading specialists. It was given to all 48 students in third-grade communications-network classes in the Lea and Holmes Schools. Pretests were administered between September and November, and posttests between April and June.

Results, summarized in Table 5, indicated that 98% of the tested third graders (not just the specified 50%) gained at least one book level.

Objective 20: Seventy percent of the fourth-, fifth-, and sixth-grade children in network classrooms will increase one book level, with 50% of the students gaining two or more book levels in a school year, as measured by pretest and posttest scores on a group informal reading inventory.

This objective was attained in fourth and fifth grades; there were no sixth-grade communications-network classrooms because no sixth-grade teachers participated in communications-network training.

The IRI was administered to all 50 fourth-graders and 145 fifth-graders in communications-network classes at Dunlap, Holmes, Daroff, Lea, and Rhoads Schools. Pretests were administered between September and November, and posttests between March and June.

Results, summarized in Table 5, indicated that 179 students (92%, not just the specified 70%) gained one or more book levels and 104 students (53%, not just the specified 50%) gained two or more levels.

SUMMARY AND CONCLUSIONS

The Affective Education project was developed to address specific problems of teachers, students, and parents. Those pertaining to teachers include (a) frustration and difficulty in relating course content to the personal lives of students, and (b) difficulty in developing and utilizing teaching techniques which decrease blocks to learning communication skills.

Problems which pertain to students include (a) poor academic achievement, especially in communication skills, (b) chronic absence and negative behavior, (c) difficulty in relating course content to their personal lives, and (d) dislike for school.

Problems pertaining to parents include (a) alienation toward "schooling", and (b) the desire to support and augment their children's learning, especially in reading, writing, listening, and speaking.

The project was implemented according to its intended mode of operation through two major components--resource services and the communications network. Both components served Title I personnel and parents. The resource-services component offered training and resources in affective techniques and curricula for enhancement of basic skill learning. The communications-network component offered parents and teachers training and resources in communication skills and the prevention or removal of blocks to language-skill learning.

The current year's evaluation consisted of (a) posttest-only control-group designs to assess students' achievement, attitude, ratings of teachers, attendance, and discipline, (b) a pretest-posttest one-group design to assess reading achievement, and (c) descriptive research to assess teachers' use of affective techniques, introductory, short-term, and support-group training, curriculum development and dissemination, development of the affective corridor, student participation, attendance, and achievement in vocational seminars and practicums, activities of graduates, and participation of parents and teachers in the communications-network component.

At the high school level, affective students were found to do as well as, or significantly better than, nonaffective students in reading comprehension and vocabulary. More than 98% of third-grade communications-network students gained one book level in reading; of fourth- and fifth-grade communications-network students, more than 91% gained one book level while more than 53% gained two or more levels.

At least 50% of SHS students successfully completed a job-practicum experience with at least a "C" grade and a 75% attendance rate. Between 30% and 40% of 1973 and 1974 SHS graduates were studying, working, or serving the military in a human service field. SHS students had significantly higher attendance rates than comparison students from the parent school, although other affective high school students did not.

Affective teachers at the middle school level successfully established and implemented a self-contained affective corridor. All observed affective high school teachers utilized affective techniques. In addition, the AEP staff developed two newsletters which were disseminated throughout the School District. Two written products, The Interdependence Journal and The Together Book, were also developed.

Affective training was provided to 1,241 educators and more than 300 parents. Eighty-five hours of communications-network training were offered to 26 elementary and 14 secondary teachers. Communications-network techniques were implemented by 22 elementary and six secondary teachers for a minimum of six weeks. Thirty-two hours of training were provided to 24 parents of communications-network students, and approximately 100 reading aides received introductory communications-network training.

Objectives specifying that affective high school students exhibit significantly fewer discipline referrals and significantly better attitudes toward school were not attained, nor did affective high school teachers receive significantly better ratings from their students than nonaffective teachers.

The project has had partial success at the secondary level pertaining to student attendance, student attitude toward school, student discipline, and students' ratings of teachers. It has been successful in meeting the needs of teachers, students, and parents through programs provided by its resource-services and communications-network components. Specifically, the project was successful in developing new curricula, disseminating information, providing in-service courses, maintaining a resource center, conducting short-term teacher and parent training, encouraging the frequent use of affective teaching techniques, delivering communications-network training, resources, and follow-up, and improving reading levels of third-, fourth-, and fifth-grade students and reading comprehension at the secondary level.

TABLE 1

NUMBER OF AFFECTIVE AND NONAFFECTIVE TEACHERS RATED ABOVE MEDIAN BY THEIR STUDENTS

Trait on Which Teachers Were Rated	Affective Teachers (N=5)	Nonaffective Teachers (N=5)
Ability to Motivate Students	4	1
Ability to Control Students	2	3
Knowledge of Subject Matter	3	2
Ability to Communicate with Students	4	1
Classroom Methods/Procedures	4	1
Fairness to Students	4	1

TABLE 2

INCIDENCE OF AEP TEACHERS' USE OF AFFECTIVE EXPERIENTIAL TECHNIQUES DURING FIVE OBSERVATIONS AT GRATZ HIGH SCHOOL

Technique	Teacher						
	A	B	C	D	E	F	G
Interdependence Grouping	5	2	2	2	1	1	4
Magic Circle	1	0	0	0	0	1	0
Games	0	0	0	1	0	0	0
Role Play	0	1	1	0	0	1	0
Fantasy	1	0	0	0	0	1	1
Process Questioning	5	0	0	0	0	0	2
Improvisation	2	0	0	0	0	0	0
Synectics	0	0	1	0	2	0	0
"I" Message	5	2	0	0	2	0	1
Open Questions	3	1	2	2	2	3	0
Active Listening	1	0	0	0	0	0	0
Personal Anecdotes	2	1	1	0	0	1	1
Teacher Physically at Child's Level	2	2	1	4	0	1	3
Student Leadership Roles	2	0	0	1	0	0	0
Academic Content Related to Personal Concerns	1	0	0	0	0	0	1
Other	3	0	0	1	0	1	0
Three or More Techniques?	Yes	Yes	Yes	Yes	Yes	Yes	Yes

TABLE 3

NUMBER OF TEACHERS ATTENDING COMMUNICATIONS-NETWORK TRAINING SESSIONS

Group	Number of Hours Attended					
	1-10	11-20	21-40	41-60	61-80	81+
Elementary Teachers	0	0	3	3	12	8
Secondary Teachers	3	4	1	1	3	2

TABLE 4

IMPLEMENTATION OF COMMUNICATIONS NETWORK PROJECTS BY 23 ELEMENTARY AND 6 SECONDARY AEP TEACHERS

Project/Strategy	Number of Teachers Implementing		
	Less than 6 Weeks	6-9 Weeks	10 Weeks or More
Expanded Sentences	0	4	0
Self-Directed Dramatization	0	1	2
Self-Invention	0	3	0
Sharing Pages	0	3	1
Success Fantasy	0	2	0
Tabor Curriculum	0	2	1
Together Book	0	0	7
Tutoring	1	0	0
Metaphors	0	2	0

TABLE 5

AEP STUDENTS SHOWING VARIOUS CHANGES IN READING LEVEL ON GROUP INFORMAL READING INVENTORY

Change Occurring between October and May Tests	Grade 3 (N=48)	Grade 4 (N=50)	Grade 5 (N=145)
Gain of 4 Books or More	0 (0%)	2 (4%)	10 (7%)
Gain of 3 Books	9 (18%)	2 (4%)	17 (12%)
Gain of 2 Books	19 (40%)	25 (50%)	48 (33%)
Gain of 1 Book	19 (40%)	19 (38%)	56 (38%)
Loss or No Change	1 (2%)	2 (4%)	14 (10%)

BENCHMARK

This project serves underachieving pupils in reading and mathematics by providing selected teachers and aides in self-contained classrooms with emphasis placed on basic skills.

RATIONALE

Analyses of citywide tests have consistently indicated high percentages of pupils in Grades 4-6 who score very low. Many of these pupils are considered underachievers--i.e., they are believed to have the potential to improve their skills despite a history of failure in the classroom.

A smaller pupil-teacher ratio is considered necessary to help improve attitudes, to provide individualized diagnosis and treatment, and to give more personal attention as needed. Parental concern and influence are solicited, because they also are thought to have positive impact on the children.

EXPECTED OUTCOMES

With the project's emphasis on reading and mathematics skills in all subjects, it is expected that pupils will show improvement in these basic skills.

MODE OF OPERATION

The project is a "reduced class size" model with paraprofessional support. The pupil-adult ratio is 10:1. The instructional program is diagnostic-prescriptive. Traditional subject-matter areas are part of the curriculum; however, the primary emphasis is on language-arts and computational skills.

In the model, the teacher and aide for each class are provided with numerous levels and types of materials. The self-contained classrooms are planned to be more informal and flexible. Instruction is organized for small groups and individuals. Three Field Coordinators under the supervision of a Project Coordinator disseminate information, observe classrooms, and offer suggestions for the implementation of the model. Sixty-two teacher/aide teams serve at 31 schools.

PREVIOUS FINDINGS

There are no previous findings because this was the first year of the project.

THE 1974-1975 EVALUATION

Evaluation of Benchmark's first year was based partly on the evaluation team's contacts with the project staff before implementation, and primarily on testing, classroom observations, and a parent survey after implementation.

IMPLEMENTATION

The project's intended mode of operation was fully implemented.

Since Benchmark was a new project, the period from September to December was used for hiring and training personnel, ordering books and materials, and selecting sites. An experimental pilot class was formed in November to test new techniques and approaches. In December, the project staff and supervisors and specialists in reading, mathematics, creative dramatics, social studies, science, and other fields provided six full days of training for project teachers prior to the formal organization of classes. Project activities were planned to start in the classrooms in January.

By January 6, 25 of the planned 31 schools had initiated the Benchmark instructional program. Four more did so the following week, and the last two schools commenced their programs in March. Program initiation involved a major reorganization of the school program--transferring selected pupils, reorganizing classes, shifting teachers within schools, and changing teacher duties and preparation times.

Underachieving pupils were selected for the project by each school principal on the basis of standardized test scores, teachers' recommendations, and parental consent. Two classes of approximately 20 pupils each were organized at each project school from lists of eligible pupils.

The evaluation team conducted two cycles of observations--one during January and February to assess initial implementation, and one in April to assess evolving changes. More than 100 visits were conducted; during 99, an observational checklist was utilized to record classroom proceedings. Each observation consisted of four five-minute intervals.

The April cycle of observations included 188 five-minute intervals. Teachers were observed in small-group or individual instruction during 62% of the intervals, whole-class presentations in 32%, and noninstructional activities (distribution and collection of materials, giving directions, preparing for lunch or recess) in 6%. The project stressed a multilevel, multimedia approach; in 68% of the intervals, pupils were using two or more kinds or levels of materials prescribed by the teacher. Language-arts instruction was observed during 58%, and mathematics instruction during 27% of the intervals.

The impact of the staff-development program was observed frequently by the evaluation team. Experience charts were copiously displayed, listening stations were set up and frequently used, and learning centers and reading corners were incorporated into most classrooms. Pupils' work, colorful charts, and displays were visible in almost every classroom.

The three field coordinators assigned to assist Benchmark teachers were frequently seen visiting the schools and classrooms. They provided consultation, information, and directions on testing, placement, and classroom management. The position of project coordinator was not filled during 1974-1975.

The majority of aides began service five weeks after the classroom programs began. This delay, due to problems in the School District's hiring process, impeded the pretesting and instructional schedule. The aides were observed working well with teachers and pupils. Their main duties were marking papers, tutoring, distributing and collecting materials, and operating audiovisual equipment.

Frequently-used materials such as kits, booklets, charts, and tapes were stored for easy access. Also observed were such homemade instructional devices as balances, toothpick geometric forms, and various games.

A review of Benchmark attendance records at the end of May indicated that 84% of the pupils attended at least 80% of the class sessions.

ATTAINMENT OF OBJECTIVES

Objective 1: Classroom facilities in each project school to consist of two classroom units with appropriate storage space, furniture, space for 20-25 children working independently, and sufficient instructional materials inventoried and available for class use.

This objective was attained.

By mid-March each project school had implemented two Benchmark classroom units, with adequate space for the enrolled pupils. Most classrooms were self-contained; some were double-sized; a few were multiple-classroom pods. However, a few of the 62 classrooms were of marginal size. Using an observational checklist, evaluators determined that before the end of the school year, sufficient instructional materials were received and inventoried by project teachers.

Objective 2: Staff selection to be accomplished so that two teachers and two instructional aides are available for each project school; teachers to be able after training to administer, score, and interpret specific achievement and diagnostic tests, and *to use instructional objectives, productive classroom management, and instructional materials; aides to be able after training to assist the teacher in working with small groups and individuals in instructional activities, carrying out necessary clerical functions, and preparing, securing, and operating teaching aids (e.g., audiovisual equipment).*

This objective was attained.

By the end of March each classroom had a teacher and an aide. Teachers administered and scored required tests at the beginning of the project and in May. They individually administered the Standard Reading Inventory twice and the Dolch Sight Vocabulary List once. Phonics Inventories and the Philadelphia Mathematics Evaluation Test (the "Levels Test") were given twice on a group basis. Teachers were observed using the results of these assessment devices for planning and instructional purposes. Instructional objectives were used to plan lessons and pace the program.

Analysis of observational checklist data in April indicated that teachers had reduced by 50% the amount of time spent on whole-class instruction since the February observations. During 62% of the 188 five-minute observation intervals, individual or small-group instruction was used.

Aides were observed working with groups and individual pupils, operating teaching aids such as listening centers, and performing clerical tasks. When the teachers were not lecturing to the total class, aides spent 40% of their time circulating among pupils and providing assistance, 14% with individuals, and 8% with small groups of children.

Objective 3: Sixty percent of the parents of Benchmark children to show active interest in their children's progress by assisting with homework, contacting the teacher, visiting the school, etc.

Attainment of this objective could not be determined conclusively because the parent-questionnaire response rate was insufficient.

A questionnaire was designed to measure parents' perceptions of changes in their children caused by the Benchmark project. The questionnaire was mailed to homes to keep parent responses free of pupil influence. From the School District computer file, 150 parents were selected randomly and sent questionnaires with prestamped return envelopes. Only 38 usable questionnaires were returned by parents of Benchmark children; this 1:4 return ratio was insufficient for conclusive findings.

Written comments by 21 parents were very favorable, two were unfavorable, four were nonevaluative, and 11 parents did not comment. Sixteen parents had visited the school at least once, and 35 provided homework assistance to their children. Two thirds of the parents indicated improvement in their children's reading ability, mathematics ability, school behavior, and opinion of their teacher. Data are summarized in Table 1. Benchmark records indicated parental visits and isolated cases of parental volunteer work.

Objective 4: Pupil selection to be made according to specified pupil achievement criteria.

This objective was attained.

A form designed by the evaluation team was used by schools to record each pupil's name, scores, and teacher recommendations. After use by principals and school staff to select pupils eligible for Benchmark, the forms were returned to the evaluation team. These data indicated compliance with Benchmark selection criteria.

Objective 5: Entry skill levels to be obtained for each instructional objective through a projectwide pretesting program.

This objective was attained.

Phonics inventories were group-administered and reading inventories were administered on an individual basis, requiring a minimum of 30 minutes per pupil. Many teachers planned to administer the tests while aides worked with other children, but since most aides were not hired until mid-February, the reading inventories were completed later than planned. The mathematics tests were group-administered between January and March, and were scored by the teacher. The testing period was extended because this was the first use of these instruments for more than half the teachers.

Except for 80 pupils in two schools who entered the project during March, all enrolled pupils were pretested. Reading and mathematics pretest results are summarized in Tables 2 and 3. Four fifths of the project pupils were reading at or below the Book 2 instructional level, and four fifths were at or below Level 5 on the mathematics pretest. These results showed that Benchmark pupils, who were in Grades 4-6, performed at the level of many children in their second or third year of school.

Objective 6: By the end of the first year, 40% of the actively participating pupils (i.e., those having at least an 80% attendance record in the project) will have mastered (90% accuracy) the word-recognition skills measured by the Phonics Inventory A & B.

This objective was attained.

More than 900 actively participating pupils were tested with the Phonics Inventory A & B by the end of May. Results showed that 366 (40%) of them correctly answered 90% of the items. Results by grade level are shown in Table 4. Sixth graders had the highest proportion of mastery (48%); 40% of fifth graders and 38% of fourth graders achieved the 90% mastery criterion.

Objective 7: By the end of the first year, 50% of the actively participating pupils will be able to recognize and pronounce 90% of the words in the Sight-Word List.

This objective was attained.

The Sight-Word List includes 220 common words used in most reading series. The project staff selected 28 easier and 28 harder words to estimate mastery of the total list. Pupils were tested individually, and had to read and correctly pronounce each word.

On this 56-item sight-word test, 73% of the project pupils attained the mastery criterion of 90% or more correct. Fifth and sixth graders exhibited greater mastery than fourth graders. Percentages of pupils achieving mastery are shown in Table 5.

Objective 8: By the end of the first year, 50% of the actively participating pupils will show an improvement of one book level on an informal reading inventory.

This objective was attained.

Teachers administered the McCracken Standard Reading Inventory, Forms A & B to Benchmark pupils on an individual basis. Independent, instructional, and frustration levels were determined for each pupil; the instructional level was used as the key reading score.

Of the 870 pupils with pretest and posttest scores, 72% gained one book level or more. The growth in reading level is summarized in Table 6. Across grades, 29% of the pupils gained one book level, and 44% gained at least two book levels (one year's growth for an average pupil). Sixth graders displayed the greatest improvement from pretest to posttest.

Objective 9: By the end of the first year, actively participating pupils with entry skills below Level 3 on the Philadelphia School Mathematics Levels Test will show an average improvement of one level.

This objective was attained.

Pupils were pretested and posttested with the Philadelphia Mathematics Evaluation Test (the "Levels Test"). The tests were administered to individuals or groups by the teachers. Teachers assisted by aides scored the tests and recorded individual pupil results. (January pretest scores are summarized in Table 3.)

Of the actively participating pupils for whom pretest and posttest scores were available, 61 (7%) scored below Level 3 on the pretest. Only three of these 61 pupils failed to gain at least one level on the posttest. The average gain for the group was two levels. Gains are summarized in Table 7.

Objective 10: By the end of the first year, 50% of all actively participating pupils with entry skills at Level 3 or Level 4 will improve at least one level.

This objective was attained.

Of the actively participating pupils for whom pretest and posttest scores were available, 53% were at Level 3 or 4 when entering the project. (January pretest scores are summarized in Table 3.) Expected attainment for average pupils in Grades 4, 5, and 6 is Level 10 or above.

Of the pupils starting at Level 3 or 4, 81% gained one level or more on the Levels Test. The average gain was 1.4 levels. Gains for pupils starting on Level 3 or 4 are shown in Table 8.

Supplementary data shown in Table 9 indicate that 74% of the pupils who scored above Level 4 on the pretest showed gains of one level or more on the posttest.

SUMMARY AND CONCLUSIONS

This was the implementation year for Benchmark, which was planned and developed since Spring 1974, and began in January 1975. Using a reduced-class-size model augmented by full-time paraprofessionals, the project was designed to meet the basic skill needs of selected fourth- to sixth-grade pupils.

The evaluation team met with the project staff monthly during the planning stages, and conducted 99 classroom observations using an observational checklist after the project began. Cognitive variables were measured by reading inventories, word lists, phonics inventories, and mathematics tests.

The project's intended mode of operation was fully implemented. Twenty-nine schools initiated the project on schedule, and two schools which had space problems were replaced by alternates. By March, the 62 classrooms serving 1,240 pupils were fully operational, each supported by a teacher and an aide. Pretests had been given and instructional materials were being delivered ahead of schedule. Teachers and aides received special training and consultation from the three field coordinators.

The enabling objectives were all attained, except one related to the active interest of parents, which could not be determined. Objectives related to improvement of reading and mathematics skills between January and the end of May were attained. Eighty-four percent of Benchmark pupils had 80% attendance or higher. In the five-month instructional period, 40% of these pupils achieved mastery of phonics skills, 73% achieved mastery of sight words, 72% gained one or more reading levels, and 81% gained one mathematics level or more. In each skill area except phonics, pupils' achievement exceeded objective expectations, showing that Benchmark had beneficial impact on project pupils.

TABLE 1

CHANGES ATTRIBUTED TO BENCHMARK PROJECT BY PARENTS OF 38 PUPILS

Characteristic of Pupil	Number of Parents Responding			
	"Much Improved" or "Improved"	No Change	"Worse" or "Much Worse"	"Don't Know" or No Response
Opinion toward teacher	24	5	2	7
Attendance	18	12	0	8
Reading ability	25	6	1	6
Mathematics ability	23	7	2	6
School behavior	24	9	0	5

TABLE 2

BENCHMARK PUPILS AT EACH INSTRUCTIONAL BOOK LEVEL* ON PRETEST: STANDARD READING INVENTORY

Reading Level	Grade 4 (N=418)	Grade 5 (N=360)	Grade 6 (N=122)
Readiness	54 (13%)	27 (7%)	6 (5%)
Pre-Primer	87 (21%)	46 (13%)	8 (7%)
Primer	70 (17%)	45 (13%)	15 (12%)
Book 1	81 (19%)	62 (17%)	12 (10%)
Book 2^1	62 (15%)	69 (19%)	13 (11%)
Book 2^2	39 (9%)	42 (12%)	17 (14%)
Book 3^1	17 (4%)	25 (7%)	14 (11%)
Book 3^2	6 (1%)	32 (9%)	15 (12%)
Book 4	0 -	8 (2%)	11 (9%)
Book 5	2 (<1%)	5 (1%)	8 (7%)
Book 6	0 -	0 -	3 (2%)

*Word recognition 95-99% correct; comprehension 75-89% correct.

TABLE 3

BENCHMARK PUPILS AT EACH MATHEMATICS LEVEL ON JANUARY PRETEST: PHILADELPHIA MATHEMATICS EVALUATION TEST

Mathematics Level	Grade 4 (N=415)	Grade 5 (N=354)	Grade 6 (N=122)
1	6 (1%)	1 (<1%)	1 (<1%)
2	38 (9%)	13 (4%)	3 (2%)
3	123 (30%)	65 (18%)	10 (8%)
4	135 (32%)	95 (27%)	40 (33%)
5	82 (20%)	102 (28%)	25 (21%)
6	26 (6%)	49 (14%)	14 (11%)
7	4 (1%)	22 (6%)	8 (7%)
8	0 -	4 (1%)	5 (4%)
10*	1 (<1%)	3 (1%)	12 (10%)
11	0 -	0 -	3 (2%)
12	0 -	0 -	1 (<1%)

*The test has no Level 9.

TABLE 4

ACTIVELY PARTICIPATING[1] BENCHMARK PUPILS ATTAINING MASTERY ON PHONICS INVENTORY A & B

Mastery Level Attained (85-Item Test)	Grade 4 (N=430)	Grade 5 (N=359)	Grade 6 (N=123)
90%-100% (77-85 Items)	164 (38%)	143 (40%)	59 (48%)
75%-89% (64-76 Items)	175 (41%)	134 (37%)	27 (22%)
Below 75% (0-63 Items)	91 (21%)	82 (23%)	37 (30%)

[1] At least 80% attendance.

TABLE 5

ACTIVELY PARTICIPATING[1] BENCHMARK PUPILS ATTAINING 90% MASTERY ON SIGHT-WORD TEST

Test	Grade 4 (N=430)	Grade 5 (N=359)	Grade 6 (N=123)
Total Test (56 Words)	282 (66%)	288 (80%)	98 (80%)
28 Easier Words	357 (83%)	329 (92%)	110 (89%)
28 Harder Words	252 (59%)	266 (74%)	98 (80%)

[1] At least 80% attendance.

TABLE 6

ACTIVELY PARTICIPATING[1] BENCHMARK PUPILS SHOWING VARIOUS CHANGES IN READING LEVEL[2] ON STANDARD READING INVENTORY

Change Occurring between January and May Tests	Grade 4 (N=410)	Grade 5 (N=345)	Grade 6 (N=115)
Gain of 2 Books or More	150 (37%)	155 (45%)	76 (66%)
Gain of 1 Book	131 (32%)	100 (29%)	18 (16%)
Loss or No Change	129 (31%)	90 (26%)	21 (18%)

[1] At least 80% attendance.

[2] Instructional reading level: word recognition 95-99% correct; comprehension 75-89% correct.

TABLE 7

ACTIVELY PARTICIPATING[1] BENCHMARK PUPILS SHOWING VARIOUS CHANGES FROM MATHEMATICS LEVEL 1 OR 2

Change Occurring between January and May Tests	Grade 4 (N=43)	Grade 5 (N=14)	Grade 6 (N=4)
Gain of 4 Levels or More	2 (5%)	0 -	1 (25%)
Gain of 3 Levels	15 (35%)	4 (29%)	1 (25%)
Gain of 2 Levels	15 (35%)	7 (50%)	2 (50%)
Gain of 1 Level	8 (18%)	3 (21%)	0 -
Loss or No Change	3 (7%)	0 -	0 -

[1] At least 80% attendance.

TABLE 8

ACTIVELY PARTICIPATING[1] BENCHMARK PUPILS SHOWING VARIOUS CHANGES FROM MATHEMATICS LEVEL 3 OR 4

Change Occurring between January and May Tests	Grade 4 (N=254)	Grade 5 (N=158)	Grade 6 (N=49)
Gain of 4 Levels or More	4 (2%)	12 (8%)	5 (10%)
Gain of 3 Levels	10 (4%)	12 (8%)	9 (18%)
Gain of 2 Levels	46 (18%)	39 (25%)	9 (18%)
Gain of 1 Level	143 (56%)	64 (40%)	20 (42%)
Loss or No Change	51 (20%)	31 (19%)	6 (12%)

[1] At least 80% attendance.

TABLE 9

ACTIVELY PARTICIPATING[1] BENCHMARK PUPILS SHOWING VARIOUS CHANGES FROM MATHEMATICS LEVEL 5 OR HIGHER

Change Occurring between January and May Tests[2]	Grade 4 (N=110)	Grade 5 (N=180)	Grade 6 (N=62)
Gain of 4 Levels or More	4 (4%)	10 (6%)	13 (21%)
Gain of 3 Levels	4 (4%)	13 (7%)	4 (6%)
Gain of 2 Levels	17 (15%)	25 (14%)	11 (18%)
Gain of 1 Level	53 (48%)	88 (49%)	20 (32%)
Loss or No Change	32 (29%)	44 (24%)	14 (23%)

[1] At least 80% attendance.

[2] The Philadelphia Mathematics Evaluation Test has no Level 9. A change from Level 8 to Level 10 is considered a gain of one level. Level 18 is the test's highest designation.

BILINGUAL EDUCATION

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

The Bilingual Education project is designed to correct the basic academic skill deficiencies of Spanish-speaking children in the nonpublic schools.

RATIONALE

It is the primary assumption of this project that basic skill deficiencies of the Spanish-speaking children in the target-area schools are generally attributable to inadequate development of language skills, especially English.

Other assumptions are (a) that the poor performance of the target-area Spanish-speaking children on standardized achievement tests is attributable to their difficulties with English language skills, (b) that Spanish-speaking children's academic abilities are equal to those of their English-speaking peers, (c) that Spanish-speaking children recently arrived from Puerto Rico require a period of adjustment and orientation to their new environment, and (d) that development of the Spanish-speaking child's competency in Spanish language skills can facilitate development of his English language skills.

The Bilingual Education project provides services to meet the needs of Spanish-speaking children by developing their English and Spanish language skills and by developing basic academic skills.

EXPECTED OUTCOMES

It is expected that through the efforts of the Bilingual Education project, Spanish-speaking pupils will demonstrate increased achievement in basic skill areas.

MODE OF OPERATION

The Bilingual Education project provides bilingual auxiliary teachers who work with Spanish-speaking children in participating schools, and operates the Cariño Center.

Auxiliary teachers are assigned to participating schools to work with the Spanish-speaking pupils. They provide instruction in English and Spanish language skills, mathematics, and/or reading. The auxiliary teachers work with classroom teachers in diagnosing the needs of individual Spanish-speaking children and in developing programs to meet their needs.

The Cariño Center has a staff of five teachers, four aides, a lead teacher, and a part-time consultant. Pupils are bussed daily from participating schools and spend the entire school day at the center, where they receive individualized instruction in mathematics, social studies, English reading, English as a second language, and Spanish. The primary instructional language is Spanish. The Cariño Center helps Spanish-speaking pupils adapt to their new environment by providing them with consultative services and by enlisting the aid and support of their parents and of all available community resources.

The major selection criterion for the center is low academic achievement resulting from the pupil's inability to understand or communicate in English. Pupils are recommended by the staffs of participating schools. Pupils who are newly arrived from Puerto Rico are given first priority for participation. Pupils remain at the Cariño Center until the center's staff feels they can function in the regular school with only the support of an auxiliary teacher.

The center provides staff development for the project's bilingual teachers and for the regular classroom teachers of participating schools. This in-service training familiarizes the regular classroom teachers with the distinctive needs of Spanish-speaking children, provides Spanish language instruction, and provides and maintains resource materials at the center which the teachers may use in developing programs.

PREVIOUS FINDINGS

In the project's initial year (1972-1973) the evaluation was formative and focused on implementation and attainment of the project's enabling objectives. Some difficulties with organization and definition of responsibilities were found.

In the 1973-1974 evaluation, the results of a group of standardized tests in English reading, Spanish reading, English skills, and mathematics indicated that the pupils could read at least as well in English as in Spanish. The project's cognitive objectives for the Cariño Center (improvement of skills in reading and mathematics) were not fully attained. In the participating schools, 80% of the pupils (not the expected 90%) mastered the skill for which they were referred. Comparison of 1973 and 1974 scores from the Bilingual Education Project Student Survey indicated no change in the self-concepts or school-related attitudes of the pupils.

THE 1974-1975 EVALUATION

The current year's evaluation of the Bilingual Education project focused on project implementation and pupils' progress in English reading, Spanish reading, and mathematics.

IMPLEMENTATION

The project's intended mode of operation was almost fully implemented. Although there was no formal counseling or feeder-school staff-development program, the Cariño Center provided an all-day program for pupils with minimal facility in English, and bilingual auxiliary teachers instructed Spanish-speaking pupils in the participating schools.

The Cariño Center had a staff of six full-time teachers, one part-time teacher, six aides, a lead teacher, and a part-time sister consultant. The center also housed the project manager and her staff.

Bussed from the participating schools, 60 pupils (Grades 3-8) attended the center daily from 9:30 until 2:30. The pupils received instruction in English conversation, English reading, English as a second language, mathematics, social studies, and Spanish. The primary instructional language at the beginning of the year was Spanish; as the year progressed, English use increased. The pupils were grouped into four achievement levels and then assigned to smaller groups within each subject to further individualize instruction.

To concentrate the center's resources on those pupils experiencing academic difficulties resulting from inadequate command of the English language, the previous year's screening procedures for admission to the center were refined. In addition to the previously used informal assessment measures, the current year's procedures included an oral paragraph-comprehension test, an oral directions test, and a test of language dominance. Using this new combination of tests, newly-recommended children and pupils already in the Cariño Center were screened. As a result, only 22 of last year's 107 Cariño Center pupils were retained for the 1974-1975 school year, and 38 pupils were added from feeder schools.

Pupils were expected to remain at the center until, in the judgment of the project staff, they could function in the home school. This was determined by comparing the instructional level of the potential returnee with that of pupils in the home school. Eighteen Cariño Center pupils returned to their schools at the end of the year, and nine were expected to enter high school in September 1975.

In the other major component of the project, bilingual auxiliary teachers were assigned to five of the nine participating schools. The types of service provided by these teachers were based upon the needs of each school. At three of the schools, auxiliary teachers taught single groups of approximately 15 children most of the day. The auxiliary teacher was responsible for providing basic skill instruction with strong emphasis on English language skills.

At the other two schools, auxiliary teachers provided remedial services to groups of three to eight pupils for approximately 45-minute periods. Pupils were selected for remedial services on the basis of their specific skill needs. However, the evaluation team's examination of these teachers' records showed no clear relationship between instruction provided and the basic skill deficiencies for which pupils were referred.

All auxiliary teachers were responsible for instructing Spanish-speaking pupils (Grades 1-8) in reading, mathematics, spelling, and/or oral and written English. The actual subjects taught and grades served were determined by the individual situation. In most cases, the instructional language was English.

Two other components of the project were not implemented. There was no formal counseling service, but counseling and/or social service was provided for individual pupils when necessary. There were no staff-development programs for regular staff in the feeder schools, but Cariño Center resources were available to them. The focus of staff development was on improvement of the project teachers' instructional methods.

A new project coordinator and the addition of a lead teacher to the Cariño Center staff provided new priorities for the project. Decisions were made to focus on the project's instructional components, to use Spanish as a vehicle for teaching English (rather than teaching it as a separate subject), and to allow flexibility in the auxiliary teachers' roles to meet the needs of the individual schools.

More communication with feeder schools has resulted in better rapport between the schools and the project. For the first time, there was intensive supervision of instruction in the feeder schools and the center, coupled with increased curriculum planning and integration. Refinement of screening procedures and improvement in procedures for reporting pupil progress continued during the 1974-1975 school year.

ATTAINMENT OF OBJECTIVES

Objective 1: To improve the project pupils' achievement in basic skills so that 60% of those attending the Cariño Center will master at least two skill levels per year on the Cumulative Record of Mathematics and the Cumulative Record of Reading of the Archdiocese of Philadelphia.

This objective was not attained.

For each pupil attending the Cariño Center, the project staff maintained cumulative records of reading and mathematics skills. When a pupil mastered a particular skill, it was recorded by the teacher.

It was determined by project staff last year that mastery of 80% of the skills listed for a given level on the cumulative records indicated attainment of that level. Table 1 showed that only 12% of the 60 Cariño Center pupils mastered two or more levels in both reading and mathematics. When the subjects were considered separately, it was found that 45% of the pupils mastered two or more levels in mathematics, and 42% mastered two or more levels in reading.

Objective 2: To improve the project pupils' achievement in basic skills so that on annually-administered standardized tests of English Reading and Spanish Reading, 75% of the Cariño Center pupils will gain in grade-equivalent (GE) scores.

This objective was not attained.

The Inter-American Tests of Reading (in English and Spanish) were administered to all Cariño Center pupils in April 1975. Level 2 was administered in Grades 3-5, and level 3 was administered in Grades 6-8.

Scores on the same test, administered in March 1974, were available for 22 of the 60 Cariño Center pupils. Of these 22 pupils, six (27%) gained in GE score on both the English and Spanish reading tests; 11 pupils (50%) made gains in English reading and nine (41%) made gains in Spanish reading.

Objective 3: To improve the project pupils' achievement in basic reading and mathematics skills so that 60% of the pupils receiving full service from the auxiliary teachers in the home school will master at least two skill levels per year on the Cumulative Record of Mathematics and the Cumulative Record of Reading of the Archdiocese of Philadelphia.

This objective was not attained for the project as a whole. However, the criterion was exceeded for first-grade pupils.

Procedures for assessing the attainment of this objective were similar to those used for Objective 1. Table 2 shows project pupils' subject mastery.

Thirty-two percent of the pupils mastered two or more levels in both reading and mathematics. When the subjects were considered separately, 60% of the pupils mastered two or more levels in mathematics, and 39% mastered two or more levels in reading. Of the first-grade pupils, 19 (83%) mastered two skill levels in both reading and mathematics.

Objective 4: To provide service to the pupils assigned to the bilingual auxiliary teacher in the feeder schools, that will improve their skills in reading, mathematics, spelling, and/or oral and written English, as indicated by the records of the bilingual auxiliary teacher and classroom observations.

This objective was partially attained.

Information gathered from the evaluation team's 15 classroom observations and examination of lesson plans and pupil-progress records indicated that pupils were receiving instruction mostly in mathematics and English language skills. However, evidence that pupils' skills improved was scant, since the relationship between pupil needs and instruction provided was not clearly demonstrated by project records.

SUMMARY AND CONCLUSIONS

The Bilingual Education project was designed to correct Spanish-speaking children's basic skill deficiencies that were attributed to inadequate language facility.

The project's intended mode of operation was partially implemented. The Cariño Center and Bilingual Education Auxiliary Teachers components were implemented, but the counseling and staff-development components were not.

The project was not successful in attaining its objectives in the basic skill areas, possibly because the project still was in a formative stage, and concentrated efforts were directed toward solving implementation problems of previous years. Another obstacle was that 63% of the project pupils were recent arrivals from Puerto Rico.

The project's success was reflected by qualitative improvements in operation and the impetus provided by the new coordinator. The improvements included more refined procedures for selection and return of Cariño Center pupils, better records of pupil progress, increased communication and greater rapport with participating schools, intensive instructional supervision, and more detailed curriculum planning. Resolution of issues concerning the role of Spanish instruction and the mode of operation for auxiliary teachers resulted in a sense of direction and unified purpose for the project.

TABLE 1

MASTERY OF SUBJECTS BY BILINGUAL EDUCATION PROJECT PUPILS AT CARIÑO CENTER

Grade	Pupils Attending Center	Pupils Mastering Two or More Levels		
		Mathematics (Regardless of Reading)	Reading (Regardless of Math)	Combination of Reading and Math
4	17	4	5	0
5	13	7	6	2
6	12	5	6	3
7	9	5	3	1
8	9	6	5	1
Total	60 (100%)	27 (45%)	25 (42%)	7 (12%)

TABLE 2

MASTERY OF SUBJECTS BY 60 PUPILS IN SELF-CONTAINED CLASSROOMS WITH BILINGUAL AUXILIARY TEACHERS

Item	Mathematics (Regardless of Reading)	Reading (Regardless of Math)	Combination of Reading and Math
No. of Pupils Instructed	42	49	31
No. Mastering Two or More Levels	25	19	10
% Mastering Two or More Levels	60%	39%	32%

COMMUNICATIONS EXPERIENCES

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

This project provides teachers with classroom support, curricular materials, film-loan services, and media workshops.

RATIONALE

The conventional classroom approach with the teacher "front and center" has been less than successful with many children. Its ineffectiveness is apparent not only in the children's poor reading skills but also in their difficulty in expressing themselves, sharing ideas, and working together.

Target-area pupils need experiences in working cooperatively with peers to complete specific tasks or projects. They need to learn effective methods of dealing with various experiences and situations. Communication skills are necessary to facilitate their acquisition of other basic skills and to provide remediation in areas of weakness. The children also need experiences which integrate learned material into viable processes and products.

The effectiveness of the children's classroom experience is directly related to the teachers' instructional skills. There is an ongoing need for teachers to shift from a teacher-centered approach to an activity- and pupil-centered approach, to develop proficiency with media tools and techniques, and to develop skill in utilizing various grouping patterns for educational purposes.

EXPECTED OUTCOMES

It is expected that participating teachers and pupils will try new approaches to meet specific needs or goals they set for their classes. New patterns of classroom organization and structure are expected to emerge as the group works toward its goal.

As pupils continue participation in the project, exposure to various modes of learning and perception will help them to improve their basic communication skills. Through media techniques, pupils will learn ways to evaluate feedback from individuals and groups, and to explore personal and group problems, issues, and questions. These experiences are expected to enable pupils to develop new behavior patterns that enable them to accept new ideas, solve problems, and work cooperatively to complete a project.

It is expected that teachers also will benefit from this project as they learn new modes of sharing and processing information, creatively using media equipment, and assuming more of a partnership with their pupils in the learning process.

MODE OF OPERATION

The project is implemented through four disparate operations: in-class support, monthly workshops, loans of equipment and materials, and dissemination of information.

In-class support. Teachers are assisted by a CE staff person to identify specific areas of concern in their classrooms. The teacher and CE staff person plan media projects using appropriate media tools to deal with the identified problems or with specific topics. Both the classroom teachers and the CE staff evaluate the ongoing process and make necessary adjustments. The teacher and a CE specialist cooperatively set up a schedule for the specialist's visits to the classroom with materials and equipment. The length of each visit varies according to the specific purpose of the visit.

Workshops. Teachers and community supportive personnel are invited to attend workshops where they are trained to be sensitive to methods of communication, and to conduct media classes and projects with or without direct CE staff support. These workshops are held for a full day when the majority of the staff is available to assist.

Loans of equipment and materials. Cameras, lights, projectors, professional and student films, and other media equipment are lent to participating schools. All loans are consistent with requirements of supply and demand. Provision of film processing, materials, and consultation is dependent on the availability of equipment and staff time.

Dissemination of information. Useful information for participating teachers is shared through (a) the Media Log, an in-house newsletter sent to interested teachers, (b) local and national publications, (c) community outlets and workshops, notably the Middle Atlantic Film Board, (d) professional and mass-communication outlets, and (e) screening and film festivals.

PREVIOUS FINDINGS

Past evaluations revealed that the major services provided by CE were the classroom efforts of the CE specialists and the distribution of films from CE's unique film library.

In the 1971-1972 evaluation, teachers and principals indicated satisfaction with the learning experiences provided by CE. Overall, teachers' perceptions of CE services were positive. Approximately 25% of the respondents indicated that they needed additional help in the media area.

On questionnaires in the 1972-1973 evaluation, six of the 16 principals who responded were quite favorable toward the project and indicated that they thought teachers had improved their attitudes toward one another and toward pupils.

Surveys of teachers and principals in the 1973-1974 evaluation indicated almost unanimous intent to continue participation in CE (39 of 41 teachers and 11 of 12 principals). Principals unanimously indicated their pleasure with the outcome of their pupils' involvement with CE, and 76% of the pupils who were surveyed expressed positive attitudes about their media work. A shortage of available equipment, the result of problems in ordering and delivery, limited the teachers' efforts to complete projects and to continue independent media activities.

THE 1974-1975 EVALUATION

The current evaluation of the Communications Experiences project focused on the classroom activities of the CE specialists. The evaluation team made classroom observations, kept anecdotal records, and surveyed pupils. The following instruments were developed for use in the current evaluation: Teacher Self-Rating Scale, Filmmaker's Checklist, Audience Checklist, a teacher-observation checklist, and a special form for rating media products.

IMPLEMENTATION

The project's intended mode of operation was partially implemented. Three full-time and two part-time CE staff members, the project director, and the assistant director provided periodic in-class support to 23 teachers and 39 groups of children. Most of the groups received one to three hours of support per week for four to seven months of the school year. A survey of CE staff revealed that in 20 of the 23 cases, they worked with teachers in planning and conducting lessons and follow-up media activities. Ten teachers did all planning and required only technical assistance; nine others relied heavily on CE staff for lesson planning and project suggestions.

Independent handling of projects by pupils and teachers was a major aim of the project. CE staff trained pupils to use media equipment, and teachers were encouraged to work independently on projects. However, they were hampered by the limited amount of media equipment available for loans, due to the project's limited funding for equipment and repairs.

Five people with no previous experience joined the CE staff this fall and because of their inexperience, the project director temporarily assigned them to serve children, postponing developmental services to teachers. Observations by the evaluator were limited by the project's late start and the evaluator's receipt of inadequate [illegible]ules of project activities until midyear. However, many media products we[illegible]erved by the evaluator. Responses to a survey of CE staff indicated a wide variety of media projects completed by pupils this year, including 64 Super-8 movies, 45 photo collages, 19 videotapes, 18 slide and slide-tape shows, 16 still photograph activities, and eight animated films.

Eight weekend workshops were conducted in other cities by CE staff to facilitate arrangement for the Media Exchange and to encourage participation by those cities' schools. CE workshops were also held as part of districtwide in-service meetings. A film-lending library in the project's central office offered 80 titles not generally available to Philadelphia schools, and was supervised by an administrative assistant. Suggestions for selection, use, and follow-up activities were provided upon request. Issues of the Media Log and other communications provided information to CE participants.

ATTAINMENT OF OBJECTIVES

As a result of the project's delayed implementation and the evaluator's receipt of inadequate CE-staff schedules during the first half of the school year, the planned serial observations for assessing the attainment of Objectives 1-4 could not be made.

Objective 1: Teachers will report an increased ability to identify causes of problems in their classrooms, on a teacher self-rating scale.

Attainment of this objective could not be determined because sufficient evaluation data were not available.

A self-rating scale developed by the evaluator and project director was to be distributed by the CE staff to all participating teachers at the beginning and end of their involvement with the project. At first, the CE staff misinterpreted this intention, thinking only new teachers should receive the rating scale, and as no new teachers were served initially, no forms were distributed until later in the year. A list of involved teachers was not received by the evaluator until November, and this proved to be inadequate. Even after a second distribution of the rating scale to all teachers in February, only five responses were received by the end of April.

Objective 2: Participating teachers will demonstrate their ability to use media equipment and to differentiate between its uses as a technical exercise and as a communications tool.

Attainment of this objective could not be determined because sufficient evaluation data were not available.

The required observations did not occur as planned because an adequate schedule of CE staff activities was not provided to the evaluation team until late in the school year. On a survey in Spring 1975, the CE staff reported that 18 of the 23 participating teachers "had begun to use media equipment creatively as a teaching tool."

Objective 3: Teachers will demonstrate an increase in the number of options available to them in diagnosing individuals' and groups' cognitive and affective needs, as evidenced by use of a broader set of prescriptive techniques to be observed and recorded on an observational checklist.

Attainment of this objective could not be determined because sufficient evaluation data were not available.

Because of the already cited unavailability of CE staff for serial observations, the observational checklist could not be used. However, it was found that due to the inexperience of the majority of CE staff members, emphasis was placed on development of skills for pupils rather than teachers.

Objective 4: Participating teachers will demonstrate an increased ability to construct activities, problems, and/or projects that encourage a variety of solutions by the students. This increase will be indicated through a series of observations.

Attainment of this objective could not be determined because sufficient evaluation data were not available.

The desired serial visits by the evaluator using the observational checklist were not possible under the circumstances already cited. However, information from the staff survey indicated that 17 of the 23 participating teachers "planned more activities that encouraged a variety of pupil solutions."

Objective 5: Pupils will demonstrate proficiency in the use and techniques of media processes by producing a media product that, when shown to a peer group, will communicate the concepts that the creators of the media product intended. The peer group viewing the product will list 50% of the intended concepts after being exposed to the media product.

This objective was attained.

Six media products (films and slide tapes) were made by individuals or small groups of pupils working with the CE staff. Using the Filmmakers Checklist, pupils listed ideas and feelings that their film intended to communicate to viewers. When each of these films was shown to a selected class in one of three distant cities, viewers listed on an Audience Checklist the ideas and feelings they thought the filmmakers were trying to convey. A comparison of Filmmakers and Audience Checklists revealed that for four of the six projects the 50% goal was exceeded; 70% or more of the concepts listed by filmmakers had been communicated to the audiences. A secondary benefit was that as pupils planned, wrote, and filmed their projects, they reinforced their skills of expressing ideas clearly and in logical sequence.

Objective 6: Seventy percent of the pupils will express a positive attitude about their media work, as determined by the Attitude Toward the Use of Media Processes scale.

This objective was attained.

A 15-item pupil survey was developed and distributed to all pupils with at least four months' involvement in the project. On the 103 surveys returned, 85% of the item responses expressed a positive attitude toward various aspects of media work. No item received less than 55% favorable responses.

Objective 7: Pupils will increase their awareness of their physical environment and how they interact with it.

This objective was attained.

Working with a staff person, six groups of pupils each completed two media projects--one before and one after CE instruction. The pupils used a limited amount of film to communicate their understanding of a given environmental problem. In reviewing these products, the evaluator was able to discriminate between preinstructional and postinstructional media products in 10 of the 12 cases.

SUMMARY AND CONCLUSIONS

The Communications Experiences project provides teachers and pupils with tools, techniques, and processes which enable them to explore and expand all their communications skills. The project was designed to meet pupils' needs for cooperative interaction with others, satisfaction in school efforts, motivation to explore cognitive and affective domains, and learning of basic communication skills.

The project's intended mode of operation was partially implemented. This year, the CE staff guided pupils in developing media projects in their classrooms, and taught teachers to provide media experiences without help. Participants had opportunities to familiarize themselves with media equipment (such as videotape recorders, movie cameras, cassette recorders, and still cameras) while finding solutions to carefully-selected communications problems.

Results of surveys and checklists indicated that all three pupil-activity objectives were attained. The CE staff indicated that pupils had completed a large number of varied media projects. Pupil responses to an end-of-year survey indicated strong positive feelings toward media work.

Attainment of the four teacher objectives could not be determined because, as a result of delayed implementation and receipt of inadequate CE staff schedules during the first half of the school year, the planned serial observations could not be made. The CE staff reported on a survey that teachers had begun to use media equipment creatively in their classrooms, and had planned more activities that encouraged a variety of pupil solutions.

Participating pupils' enthusiasm and teachers' many requests for services and equipment indicated that the project has had positive impact on teacher and pupil participants. However, an increased program of CE staff development and a larger budget for repair and replacement of worn media equipment seem necessary for the future.

COMPREHENSIVE MATHEMATICS

The Comprehensive Mathematics project is designed to improve computational skills of students having low achievement in mathematics. Component "A" serves low-achieving students of Grades 1-6. Component "B" serves secondary school students having fundamental mathematical difficulties. Component "C" provides staff development to teachers of educable mentally retarded students.

RATIONALE

Students for whom the Comprehensive Mathematics project was designed have repeatedly exhibited a deficiency in mathematics indicated by teacher assessment and their scores on California Achievement Tests. Several general needs and problems were identified as possible causative factors:

1. Lack of emphasis in schools for teaching basic mathematical skills;

2. Diversity of eclectic approaches to the teaching of mathematical concepts;

3. Lack of uniformity in evaluating student progress within the classroom; and

4. Students' negative attitudes toward mathematics.

Using various procedures, the three components of the Comprehensive Mathematics project stress the importance of teaching mathematical skills, define methods of teaching mathematics, delineate what should be taught and in what sequence, and provide instruments for assessing student progress.

EXPECTED OUTCOMES

Through the implementation of the project, a significant decrease in the number of students who score below the 16th percentile in mathematics on the California Achievement Tests is expected at all grade levels. Additionally, an improvement in functional mathematical skills should be evident for regularly attending students. With the increased proficiency of mathematics skills, a positive attitude is expected to develop toward mathematics in general.

MODE OF OPERATION

Component "A" in Grades 1-6. One hundred sixteen elementary mathematics resource teachers (EMRTs) guide the mathematics curriculum for their respective schools. The variety of teaching situations requires the resource teacher to modify and refine approaches to the instruction of mathematics within the parameters of the program to effect optimal results in his school. To fulfill this role, the resource teacher develops with the classroom teacher techniques to improve learning, introduces new materials and visual aids to enrich learning situations, evaluates the successes of each class and the school according to projected progress rates, monitors classroom interactions, stimulates interest in mathematics through staff development, and supplements teacher efforts via small-group and individual instruction.

The ongoing emphasis of this component is the individualization of instruction, student and school evaluations, and the continuity of the recommended approach for 64,970 students, Grades 1 to 6, in Title I schools.

Component "B" in Grades 9-10. Ninth- and tenth-grade Title I students from Bartram and West Philadelphia High Schools scoring below the 16th percentile on the California tests are included in this component of the project. Remediation in mathematics skills is stressed. Paraprofessionals trained for small-group instruction and tutorial teaching procedures provide individualized instruction and monitor student progress on an ongoing basis.

The ILA provides a series of tests to diagnose the initial placement of the pupil in a specific skill booklet at his level of achievement in each of five mathematical areas: numeration/place value, addition/subtraction, multiplication/division, geometry and measurement, and applications. Each booklet has a title written in behavioral terms with an accompanying posttest taken at the completion of that booklet. The student's proficiency in a skill area determines whether he is assigned the entire booklet or parts of the booklet. A total of 85% correct on the posttest indicates mastery of that skill and the pupil proceeds to the next booklet. Less than 85% correct indicates the need for remedial activities that reinforce that skill.

The degree of difficulty of these booklets forms a hierarchical sequence beginning with the development of number-system concepts and terminating with the application of concepts.

Component "C" for educable retarded children. Twenty-four regular teachers of educable mentally retarded children receive intensive training in the techniques of integrating hands-on activities and materials as a means of teaching mathematics. The hands-on technique provides instructional individualization and concrete activities designed to foster conceptual understanding and to improve concept and skill development. The training includes the presentation of innovative methods for individualizing instruction and utilizing laboratories and activity corners in instruction, exposure to a variety of curriculum resources, the use and interpretation of instruments for monitoring pupil progress, and guidelines for obtaining relevant supplies for the teaching situation.

The project supervisor monitors the program and plans summer staff-development sessions. Additional staff-development sessions are conducted during the regular school session to clarify problems encountered by teachers during the actual practice of the program and to offer continuous motivation. During his visits to the classroom, the supervisor demonstrates innovative techniques appropriate to the lesson he observes.

PREVIOUS FINDINGS

During the project's initial year (1972-1973), each of the participating schools had a mathematics specialist who assisted teachers in the development of more effective mathematics lessons. The evaluation indicated the need for (a) increased individualization of the instruction and (b) more specific guidelines for monitoring the program.

As a result, in the 1973-1974 school year (a) classes for secondary students were reduced from 28 to 25 students per class, and (b) increased emphasis was placed on updating pupil records to permit their use in continual diagnosis as well as for evaluation. All components of the project provided methods for individualizing instruction, diagnosing student needs, and prescribing remedial instruction. The project was generally successful in improving students' mathematical skills. Any discrepancies between stated objectives and actual results could be attributed to specific objectives which were unrealistic for the students included in the project.

THE 1974-1975 EVALUATION

As in previous years, the 1974-1975 evaluation of the Comprehensive Mathematics project focused on the project's progress toward attaining its stated objectives.

IMPLEMENTATION

The project's intended mode of operation was fully implemented for all three components.

Component "A". Instructional levels for the participating students were determined by Philadelphia Mathematics Evaluation Test scores. Students' progress was continuously monitored, with checkpoints in January and June. Data were reported to the project's central office, where they were tabulated and graphed by the assessment coordinator. The project director made on-site visits to assess the performance of the 116 elementary resource teachers and the availability of materials, and to review student progress records.

Component "B". Participating Bartram High School ninth- and tenth-graders were pretested and posttested with the Philadelphia Test in Fundamentals of Arithmetic (Form C) to determine their instructional levels and assess their progress. General mathematics students were rostered for classes of no more than 25 students, and teachers used a variety of instructional methods.

At West Philadelphia High School, 60 students were selected to participate in an individualized program using the Research for Better Schools' "Literacy in Math" curriculum. The Philadelphia Test in Fundamentals of Arithmetic (Form E) was used to measure students' progress.

Component "C". Twenty-four teachers participated in intensive staff-development sessions focusing on instructional techniques and materials for educable mentally retarded children. The YAT Attitude-Toward-Mathematics Scale was administered to determine the effects of staff development on teachers' attitudes toward teaching mathematics.

The Key Math Diagnostic Arithmetic Test was administered to all project children in the fall as a pretest and diagnostic instrument, and was readministered in June to measure progress.

ATTAINMENT OF OBJECTIVES

Component "A" (Elementary Mathematics Resource Teacher)

The Philadelphia Mathematics Evaluation Test (also known as the Levels Test) and the California Achievement Tests (CAT) were used to examine progress of children in the EMRT program. The levels represent a hierarchical sequence of difficulty. At each level, six areas are covered--systems of numeration, rational number system, fractions, measurement, organizing and interpreting, and geometry. A manual assists teachers in diagnosing students' problems before advancing them to a more difficult level.

Grade-by-grade data from the May 1974 CAT administration were not available for comparison in 1975. Because of this, it was necessary to use data across Grades 1-6 in interpreting 1975 results for Objectives 2 and 3.

Objective 1: To enable the children, on the average, to gain at least two instructional levels a year in the School District's mathematics curriculum.

This objective was attained.

Median growth on the Philadelphia Mathematics Evaluation Test for 58,881 project students was two instructional levels. Fifty-six percent of the students achieved two or more levels of growth. Growth is summarized by district in Table 1.

Objective 2: To reduce the percentage of pupils in Grades 2, 4, 5, and 6 below the national 16th percentile in standardized test results.

This objective was attained.

The CAT mathematics sections were administered to 59,375 project students in Grades 1-6. The percentage of students having Total Mathematics scores below the 16th percentile was reduced from 33% in May 1974 to 30% in February 1975. Changes in percentage of students scoring below the 16th percentile are summarized in Table 2.

Objective 3: To increase the percentage of pupils in Grades 2, 4, 5, and 6 above the national median in standardized test results.

This objective was attained.

The percentage of 59,375 Grade 1-6 project students having Total Mathematics scores above the national median on the CAT increased from 31% in May 1974 to 33% in February 1975. Changes in the percentage of students scoring above the national median are summarized by district in Table 3.

Component "B" *(Secondary Schools Improvement)*

Objective 4 (West Philadelphia): To enable pupils who are 16th percentile or lower nationally and two or more years below grade level to make progress in learning mathematics skills normally considered part of an elementary mathematics program.

This objective was attained.

The Philadelphia Test in Fundamentals of Arithmetic (Form E) was administered in September and June. Pretest and posttest scores were compared for 42 students who remained in the program from September until June. On a nine-level scale (low to high: 1, 2-, 2+, 3-, 3+, 4-, 4+, 5-, 5+), the 42 students had a median score of 2- on the pretest and 3- on the posttest. Thus their median score improved two levels as specified in the objective.

Objective 5 (West Philadelphia): Pupils will make progress in elementary mathematics skills, as evidenced by mastery of curriculum booklets which have an 85% mastery criterion score. Pupils will progress by an average of one curriculum level in at least four of the five designated areas of curriculum.

This objective was partially attained. Sixty-nine percent of the students mastered one or more levels in four of the five curriculum areas.

Project students were given the Research for Better Schools' Individualized Learning for Adults (ILA) program. ILA provided a series of tests to determine placement in skill booklets for five mathematics areas--numeration/place value, addition/subtraction, multiplication/division, geometry/measurement, and application. Accompanying posttests were taken at the completion of each booklet.

Results for the 42 students who remained in the program from September to June showed mastery of at least one level by 16 students in all five areas, 13 in four areas, nine in three areas, and three in two areas; and one student in only one area.

Objective 6 (Bartram): To show an increase in pupils' rate of achievement in basic mathematics skills as compared with their average rate for the preceding three years.

Attainment of this objective could not be determined because students' growth rates for the preceding three years were not available.

Objective 7 (Bartram): Sixty-five percent of the pupils will achieve one-half year's improvement (one test level) in mathematics skills, as measured by the Philadelphia Tests of Fundamentals of Arithmetic.

This objective was attained.

The 65% criterion was exceeded. Of the 537 students, 76% achieved at least the specified one level of growth on the Philadelphia Test in Fundamentals of Arithmetic (Form C) from pretest to posttest; 62% improved at least two levels.

Component "C" *(Activity-Centered Mathematics for Retarded Educable Children)*

Objective 8: The child will achieve an average growth of five months in the areas of Content, Applications, and Operations, as measured by the Key Math Diagnostic Arithmetic Test.

This objective was attained.

The Key Math Diagnostic Arithmetic Test was administered in September and June to 154 elementary and 46 secondary retarded educable students. Data for each student included a total score and subscores in the areas of Content (numeration, fractions, geometry, symbols), Operations (addition, subtraction, multiplication, division, mental computation, numerical reasoning), and Application (word problems, missing elements, money, measurement, time).

Of the 200 students with pretest and posttest scores, 79% attained the expected growth of five months. Elementary students' median growth from pretest to posttest was eight months; secondary students' was 12 months.

Objective 9: To maintain or improve a positive attitude toward the teaching of mathematics on the part of the teachers, as measured by the YAT Attitude-Toward-Mathematics Test.

This objective was attained.

The YAT was administered at a staff-development session in Summer 1974, and readministered in June 1975 to 22 of the 24 teachers who remained in the program. The maximum scale value on the YAT test is 10.83. Teachers' median score on both the pretest and the posttest was 7.85; this indicated that positive attitudes toward the teaching of mathematics were maintained.

SUMMARY AND CONCLUSIONS

The Comprehensive Mathematics project's three components emphasized improvement of mathematical skills for defined student populations with demonstrated deficiencies. Students in all components were given a pretest to diagnose their needs and determine appropriate instruction levels, and a posttest to assess their improvement. All components were fully implemented according to the intended mode of operation.

Component "A" of the project was fully implemented and was continuously monitored by the project supervisor. Its specific objectives were attained. The EMRT Program appears to be achieving the goal for which it was instituted--to halt the decline in mathematics achievement in Grades 1-6.

In Component "B", pupils who were deficient in basic elementary mathematical skills at two senior high schools were exposed to programs using a variety of methods stressing small-group and individualized instruction. Although all of the specific objectives were not attained, gains in score on the Philadelphia Test in Fundamentals of Arithmetic provided evidence that the program was successful in bringing about some improvement in basic mathematics skills for the majority of the participating students.

The objectives of Component "C" were met, and there is evidence of pupil progress in the acquisition of basic mathematics skills in the areas of content, operations, and application. There was emphasis in the staff-development sessions to use concrete, manipulatory techniques of the Activity-Centered Mathematics Program. Results on the YAT Attitude Test indicated that the initial positive attitude of the teachers toward the teaching of mathematics was maintained.

TABLE 1

SUMMARY OF NUMBER OF LEVELS OF MATHEMATICS GROWTH IN ONE YEAR BY 58,881 STUDENTS IN COMPREHENSIVE MATHEMATICS COMPONENT "A"

District	Percentage of Students Showing Growth				
	No Change of Level	One Level	Two Levels	Three Levels	Four or More Levels
1	12%	34%	33%	15%	6%
2	10%	35%	33%	17%	5%
3	12%	32%	31%	18%	7%
4	11%	33%	32%	17%	7%
5	9%	30%	36%	19%	6%
6	14%	30%	35%	16%	5%
7	10%	32%	31%	18%	9%
Seven Districts	11%	33%	33%	17%	6%

TABLE 2

PERCENTAGE OF STUDENTS (GRADES 1-6) IN TITLE I SCHOOLS WHOSE CAT-70 TOTAL MATHEMATICS SCORES WERE BELOW NATIONAL 16th PERCENTILE

District	1974	1975	Change
1	32%	27%	- 5
2	38	34	- 4
3	30	29	- 1
4	32	31	- 1
5	36	31	- 5
6	32	27	- 5
7	41	30	- 11
Seven Districts	33%	30%	- 3

TABLE 3

PERCENTAGE OF STUDENTS (GRADES 1-6) IN TITLE I SCHOOLS WHOSE CAT-70 TOTAL MATHEMATICS SCORES WERE ABOVE NATIONAL MEDIAN

District	1974	1975	Change
1	32%	37%	+ 5
2	26	29	+ 3
3	32	35	+ 3
4	33	33	0
5	28	31	+ 3
6	31	36	+ 5
7	23	30	+ 7
Seven Districts	31%	33	+ 2

COMPREHENSIVE READING PROJECT

The Comprehensive Reading Project has several components, which are reported consecutively in the following order:

Classroom Aides
Districts 1-7 Reading*
Improvement of Reading Skills "A" and "B"
Improvement of Reading Skills "C"
Individualized Education Center
Instructional Materials Centers
Kindergarten Aides
Language Arts Reading Camps
Operation Individual
Parent School Aides
Primary Reading Skills Centers
Reading Enrichment and Development
Reading Improvement through Teacher Education
Summer Adventures in Learning
Summer Reading Readiness

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*Separate technical reports on the District Reading Projects are issued annually by the Office of Research and Evaluation's Department of Priority Operations Evaluation Services. Although these projects are not treated in the Title I Technical Reports, they are included in the briefer volume of Title I Abstracts.

CLASSROOM AIDES
(A Component of the COMPREHENSIVE READING PROJECT)

The project provides classroom aides in Grades 1-3, thereby enabling teachers to individualize instruction and to develop better teacher/pupil rapport.

RATIONALE

In Philadelphia, target-area pupils tend to score substantially below national norms on standardized tests. Many of the Title I schools are at peak enrollment or are overcrowded. The Classroom Aides project was developed to enhance the quality of education in these schools. Target-area schools need more individualization of instruction than other schools because of their higher proportion of pupils with learning disabilities.

Teachers whose classes are at peak enrollment or are overcrowded need supportive assistance if they are to give more attention to individuals and to small groups of pupils. The aides provide this supportive assistance, by relieving teachers of most of their routine clerical and housekeeping duties and by assisting them with small-group and individual instruction. With respect to classroom organization and classroom management, the addition of another adult allows greater flexibility in grouping and in differentiation of instruction.

EXPECTED OUTCOMES

With aides helping their teachers, children are expected to have more beneficial learning experiences, more personal supervision, more adult reinforcement, and more rapid feedback. The aides can be available to guide, stimulate, and encourage the pupils spontaneously or upon request. Because small-group learning and a wider range of activities are more feasible in classrooms with aides than in classrooms where the teacher is working alone, the teacher/aide teams can develop a learning environment that is suited to the pupils' varying needs.

Use of aides who live in the school neighborhood is expected to encourage communication between adults and pupils that is neither threatening nor misunderstood. The aides can help the children to adjust to their school situation and can interpret some aspects of their classroom behavior to their teachers. Because aides have overcome some of the difficulties and frustrations the children now face, they may serve as models of success for the children to emulate.

MODE OF OPERATION

Because school size and needs vary, allocations vary from one to six aides per school. Through faculty meetings, workshops, and individual observations and evaluations, each principal seeks to develop an organization which encourages greater involvement of the teaching team.

The aides help small groups of children improve basic reading and mathematics skills by (a) supervising instructional games in specific skill areas, (b) conversing with children about their learning experiences at the various classroom interest centers to increase the children's oral communication, and (c) aiding children in selecting and borrowing books from the classroom library.

The aides follow teacher directions in assisting with audiovisual instruction, making bulletin-board displays, securing instructional materials, maintaining and preparing records and forms, and assisting with outdoor activities.

Under the direction of the training coordinator, monthly two-hour in-service training sessions are conducted over the October-May period. Released time is provided so that aides may attend these mandatory sessions. Resource personnel to conduct the training sessions are provided by the offices of Affective, English, and Mathematics Education at no cost to the project. In addition, every aide attends the initial program orientation session in September.

Thirty-six of the aides who are also enrolled in the Career Opportunity Program attend daytime college classes two days per week.

PREVIOUS FINDINGS

In previous years, classes with aides were found to have greater gains in ITBS scores than classes without aides. The larger proportion of time the aide spent with one class, the greater the aide's effect on pupil progress. Individualization of instruction was facilitated when aides performed instructional tasks, but not when they performed primarily noninstructional tasks. By reducing the number of noninstructional tasks the teachers performed, aides increased the amount of time the teacher could devote to instruction.

In 1972-1973, approximately one fifth of the schools had a ratio of one aide to less than two teachers, and one fourth of the schools had a ratio of one aide to four or more teachers. In the past four years, no viable adjustments were made to obviate such weaknesses in the project as inconsistent use of the aides from school to school and the lack of a designated project director.

The 1973-1974 evaluation revealed that aides spent an average of 62% of their classroom time in supervising and/or tutoring individuals and small groups of children, 13% in performing clerical tasks, and 25% in doing housekeeping tasks, class trips, operation of A-V equipment, and other activities. Compared with teachers without aides, the teachers who had aides were enabled to spend an average of 17 additional minutes per 45-minute observation in implementing an individualized and small-group instructional program. Furthermore, teachers with aides were observed to have less-frequent discipline incidents in the classroom than teachers without aides.

THE 1974-1975 EVALUATION

The current year's evaluation of the Classroom Aides project focused on (a) the extent to which previously noted deficiencies had been corrected, and (b) the degree to which individual and small-group instruction was enhanced by the provision of aides to classroom teachers.

IMPLEMENTATION

The project's intended mode of operation was partially implemented.

Questionnaires were completed by 107 project teachers and 78 classroom aides. Results showed that 87% of the teachers received daily aide service for an average of 90 minutes per week. Fifty-eight percent of the aides rated their total experience as "extremely favorable", and 37% as "favorable", and four fifths of their teachers believed that the aides were satisfied with their assigned tasks. Teachers and aides both indicated that the aides had gained personal satisfaction, professional growth, and knowledge of academic and affective needs and development patterns of children.

Fifty-six of the 78 surveyed aides indicated that the classroom teacher most often supervised their work; six indicated the reading teacher; one indicated the assistant principal. The classroom aide's contribution to the overall education of pupils was rated "good" to "excellent" by 88% of the teachers; they reported that aides' impact was most pronounced in reading and arithmetic.

Working relationships between teachers and aides were rated "good" to "excellent" by 97% of the teachers and 100% of the aides. Ninety-three percent of the teachers requested that an aide be assigned to their classroom in the next school year, and 91% specifically requested the services of their currently-assigned aide. Twenty-eight percent of the aides said they wanted to continue their current work assignments next year; 24% felt that the program would be strengthened if they spent more time with small groups of children; 19% believed that they should be devoting more time to assisting children individually; and 17% requested an increase of staff-development sessions. Seventy percent of the aides and 81% of the teachers stated that the educational program would be noticeably weakened if the aides were not present; many teachers felt that individual attention and the reading program would be seriously curtailed. Aides felt they most successfully worked with small groups and individual children and performed classroom-related clerical duties.

Attendance records of a random sample of 50 of the project's 181 aides revealed that from September to May, 66% of the aides were absent 0-15 days, 12% were absent 16-25 days, and 22% were absent more than 25 days. Because substitutes were not provided when regularly-assigned aides were absent, a reduction in services was experienced in classrooms served by aides with more than 15 absences. Also, since the introduction of the Career Opportunity Program, 36 of the classroom aides attended college two days per week. Thus, the amount of aide time provided to some schools was reduced and the project was severely compromised.

As in the past three years, there was no project coordinator to facilitate long- and short-range planning and day-to-day administration and supervision. The project's intended mode of operation called for a training coordinator to assume full responsibility for project implementation; however, that position was not filled.

The number of aides allocated to each school varied from one to six, depending on the size and needs of the school. Most classroom teachers permitted aides to work with children only in reading. However, none of the staff-development programs concentrated on improving the aides' abilities to tutor children in reading. Each aide was required to attend an orientation session in September and eight in-service training sessions throughout the year--three in mathematics, three in affective education, and two in creative dramatics. Questionnaires were administered at the end of each session, and the aides responded that the training was useful and would increase their effectiveness in working with small groups and individuals.

ATTAINMENT OF OBJECTIVES

Objective: To enable teachers to better implement an individualized and small-group instructional program, by providing classroom aides (a) serving only Grades 1-3, (b) serving not more than three classes each, and (c) devoting at least 65% of their daily time primarily to supervising and/or tutoring individuals or small groups of children, not more than 15% of their time to clerical tasks (e.g., grading, record keeping) for the teacher, and not more than 20% of their time to such activities as class trips, operation of audiovisual equipment, and housekeeping tasks.

The objective was partially attained. Subobjectives a and b were attained; c was partially attained; the overall objective of enabling teachers to better implement individualized and small-group instructional programs was fully attained.

Each aide was randomly assigned two separate weeks during the year in which to maintain a log showing how much time she spent daily on 14 special activities and the number of teachers, classes, and grades she serviced. Aides were trained by the evaluation team in the fall to maintain the special NCS computerized weekly log (Weekly Summary of Activities--Form 18-440). A VALTREP program transferred the data to a computer tape. A custom-designed program converted the data for the activities to minutes, averaged the number of minutes for each activity across all aides, and converted the minutes to percentages of weekly time. The evaluators examined the 228 logs submitted by 181 aides.

The evaluation team also observed 169 primary-grade classrooms in 64 schools; 100 classes had aides and 69 did not. Observed classes were selected on a random basis. Evaluators recorded their observations of teacher and aide functions using the Scheiner Observation System (SOS), which enabled them to note 37 classroom activities that could be performed by the teacher alone, the aide alone, or both together, and the interaction between pupils, teachers and/or aides. Each observation period lasted 50 minutes; the 37 variables were recorded in five-minute segments on a computerized coding sheet. A VALTREP program transferred the data to a computer tape. A customized computer program averaged the frequencies per observation period and performed one-way analysis of variance between classes with and without aides on the 37 variables.

The evaluators also interviewed 221 staff members in 36 schools to ascertain their views of the Classroom Aides project. Questionnaires completed by 107 project teachers and 78 aides provided further information.

It was ascertained from the logs that 90% of all aides were assigned to Grades 1-3 only; 6% to Grade 4, and 4% to Grades 5-6. With such a difference from previous years, when aides could be assigned freely to Grades 1-6, part a of the objective was almost fully attained.

Logs also revealed that the average aide served 2.1 classes (standard deviation = 0.98) and 2.1 teachers (standard deviation = 0.98) during an average week. Thus part b of the objective was attained.

Log data further indicated that aides spent 34.4% of their daily time supervising and/or tutoring small groups of children, and 27.9% working with individual children. This total of 62.3% of daily aide time spent helping children was less than the 65% specified in part c of the objective. Aides spent 15.1% of their daily time performing clerical tasks, virtually the specified maximum. They also spent 14.0% of their daily time in housekeeping, supervising breakfast/lunch programs, operating audiovisual equipment, and other miscellaneous activities; this was below the 20% stipulated in the objective. Responses of 107 teachers on a questionnaire concurred with these findings from the aides' logs. Thus part c of the objective was partially attained.

Despite the incomplete attainment of part c, the overall intent of the project, "to enable teachers to better implement an individualized and small-group instructional program," was achieved. Data gathered by the SOS are summarized in Tables 1 and 2. In comparison with nonproject classes, classes with aides were characterized by significantly more small-group and less whole-class instruction, less direct lecturing and directing by the teacher, and less disciplining of children by the teacher. Greater differentiation of materials was observed in project classes. Thus, with the aide's presence, the CA teacher allowed children to move at their own pace on different materials.

Significantly less noninstructional use of pupil time was observed in project classes. However, cooperation, rapport with teacher, interest, and involvement of pupils were judged "excellent" more frequently in nonproject classes, possibly because of unaided teachers' insistence on undivided attention during teacher-directed whole-class activities. Although teachers in non-CA classes spent significantly more time (27.4%) working with individual children than teachers in CA classes (7.8%), in the CA classes the aides also were working with individual children 18.1% of the observed time. Thus, overall there was little difference in the actual amount of time that children received individual instruction from an adult in project and nonproject classes.

Teachers with aides were observed spending less time disciplining children than teachers without aides. While the average non-CA teacher had to halt class instruction to handle disruptive children personally, the evaluation team observed aides dealing with such children while CA teachers continued uninterruptedly with class instruction.

Although there were no significant differences between project and nonproject teachers in the amount of time they circulated as resource persons or worked with small groups of children, the presence of the aide engaging in similar types of activity more than doubled the availability of adult assistance for the pupils.

SUMMARY AND CONCLUSIONS

The Classroom Aides project was designed to increase the adult/child ratio, thereby giving teachers greater opportunities to individualize instruction and develop better rapport with their pupils. The project's intended mode of operation was partially implemented.

Great variation was found in the number of aides assigned to a school, the manner in which aides were utilized, and the amount of time per week that an aide spent with a teacher. The average aide serviced two teachers daily. Since the introduction of the Career Opportunity Program, 36 classroom aides attended college two days per week, thus reducing the CA project's service to schools.

Although the eight staff-development programs were in mathematics, creative dramatics, and affective education, most aides assisted teachers by helping children with reading. Teachers favorably rated aides' contributions to the education of pupils, and their own working relationships with aides. Aides felt they most successfully worked with small groups and individual children, and performed classroom-related clerical chores.

Attendance patterns of aides were found to be unsatisfactory. From September to May 1, one third of the aides were absent more than 15 days. Another implementation problem was that there was no project coordinator directly responsible for organization, long- and short-range planning, and day-to-day administration.

The project's three subobjectives were fully or partially attained. Most aides were assigned only to Grades 1-3. The average aide also served 2.1 classes and teachers, which was below the permissible maximum of three classes. Aides spent 62% (not the specified 65%) of their daily time working with children, 15% (the specified maximum) in clerical duties, and 14% (less than the specified maximum) in other housekeeping activities. The overall goal of enabling project teachers to better implement individualized and small-group instruction was attained.

The greatest impact of the project was in small-group instruction. Observations and interviews with school staff revealed that significantly more small-group instruction took place in an aide's presence. Project classes had significantly less whole-class instruction, less direct lecturing by the teacher, and more children working on different materials than nonproject classes. Aides also handled discipline problems so the teacher could continue lessons without interruptions.

TABLE 1

CONDITIONS FOUND IN OBSERVED CLASSES (GRADES 1-3) WITH AND WITHOUT CLASSROOM AIDES

Focus of Observation	Mean Percentage of Time		
	In 92 Classes with Aides		In 68 Classes without Aides
Group Size[1]			
Individual (1 or 2)	10.9%		8.5%
Small Group (3 to 7)	22.7*		14.6
Large Group (7 or more)	23.0		18.3
Whole Class	64.5		72.8*
Differentiation of Materials			
Low, almost every pupil working on same assignment	73.9		74.5
Differentiated pacing, at least 4 pupils working on different pages of same book	7.1		12.4**
Differentiated materials, at least 4 pupils working on different materials	19.0*		13.1
Teacher/Aide Behavior[1]	Aide	Tchr.	Teacher
Lecturing, directing whole class	12.3	35.8	64.2****
Working with small group	34.1	25.8	18.4
Circulating as resource person	18.7	15.5	16.8
Working with individual children	18.1	7.8	27.4****
Performing housekeeping chores	3.8	4.1	5.8
Performing clerical tasks	15.5	15.0	12.9
Disciplining one or more children	10.1	25.9	36.5****

TABLE 1 (Continued)

CONDITIONS FOUND IN OBSERVED CLASSES (GRADES 1-3) WITH AND WITHOUT CLASSROOM AIDES

Focus of Observation	Mean Percentage of Time	
	In 92 Classes with Aides	In 68 Classes without Aides
Pupil Cooperation, Rapport with Teacher		
Excellent	15.5%	31.2%****
Adequate	75.8****	56.3
Inadequate	8.7	12.5
Pupil Interest, Involvement, Attentiveness		
Excellent	15.7	27.6***
Adequate	75.9****	61.2
Inadequate	8.4	11.2

[1] Sum of percentages exceeds 100 if various conditions were observed concurrently.

*Significantly greater ($p<.25$) than corresponding percentage in adjacent column.

**Difference significant at the .10 level.

***Difference significant at the .05 level.

****Difference significant at the .01 level.

TABLE 2

ACTIVITIES OF PUPILS (OBSERVED IN RANDOM GROUPS OF SIX) IN CLASSES (GRADES 1-3) WITH AND WITHOUT AIDES

Focus of Observation	Mean Number of Pupils	
	In 92 Classes with Aides	In 68 Classes without Aides
Instructional Activities		
Paper-pencil activity	2.8	2.8
Attending to group activity (listening, watching)	2.2	2.5
Teacher-pupil interaction (teacher-initiated)	0.9	0.1
Pupil-teacher interaction (pupil-initiated)	0.5	0.5
Pupil-pupil interaction (academic)	0.6	0.6
Aide-pupil interaction (aide/teacher-initiated)	0.7	-
Pupil-aide interaction (pupil-initiated)	0.3	-
Noninstructional Activities		
Pupil-pupil interaction (nonacademic)	0.7	0.9
Unstructured activity (waiting, getting materials)	0.7	1.2****
Deviating from class instruction	0.6	0.7

****Significantly greater (p<.01) than corresponding number in adjacent column.

IMPROVEMENT OF READING SKILLS "A" AND "B"
(A Component of the COMPREHENSIVE READING PROJECT)

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

Individualized instruction for seriously deficient readers is provided through the use of selected reading materials and audiovisual aids, ("A") in a Reading Skills Center, or ("B") using a teacher shared by a public school and a nonpublic school.

RATIONALE

Citywide testing over the past few years has indicated that of all groups, the children in Grades 4-6 have the most dramatic needs in reading comprehension and vocabulary skills. Diagnosis and correction of these children's serious reading deficiencies prior to their entry into secondary schools are critical to the future cognitive attainment of these children. Since these children have had low success in classrooms, specialized assistance is required.

EXPECTED OUTCOMES

It is expected that pupils' scores on informal reading inventories and phonics inventories will show marked improvement of reading, decoding, vocabulary, and comprehension skills.

MODE OF OPERATION

Underachievers in Grades 4-6 are identified by classroom teachers and through the use of tests. When they are selected to enter the project, pupils are given an informal reading inventory and the Botel Phonics Inventory to facilitate diagnosis and placement.

Pupils leave their classrooms and go to the reading specialist in the Skills Center. Daily instructional time varies from less than 45 minutes to more than an hour. The pupils work individually or in small groups on individually prescribed assignments. Multimedia equipment and multilevel materials are utilized to accommodate the various needs, interests, and skill levels.

Each full-time Reading Skills Center is supplied with many reading books, kits, and workbooks. Listening carrels are equipped with earphones and outlets, small phonographs, and cassette recorders. Pupils are cycled from one experience to another as needed. Full-time aides are assigned to assist the reading teacher in the preparation for instruction, in the follow-up of each pupil's progress, in record keeping, and in reviewing work with pupils.

The Reading Skills Center teachers provide ongoing consultation with teachers and periodic staff-development sessions where topics include individualized instruction techniques and materials to correct pupils' reading problems. Centers are also used as models for visiting teachers.

Program "B" differs from Program "A" in several ways. The shared-time reading specialists work in both public and nonpublic schools, and do not have the services of aides. They use available facilities in their schools rather than a specially equipped site, and provide only informal consultation with teachers.

PREVIOUS FINDINGS

Since the project's initiation in 1966, pupils have shown improvement in comprehension, word-attack, and phonics skills. In 1970-1971, standardized tests indicated that project pupils' low scores in vocabulary were reversed after two years, and low scores in comprehension were reversed after one year. During the following years pupils continued to improve their basic reading skills.

THE 1974-1975 EVALUATION

The current evaluation of Improvement of Reading Skills "A" and "B" involved a continuation of past procedures: observations, interviews, and analysis of test results.

IMPLEMENTATION

The project's intended mode of operation was fully implemented.

A program of remediation and instruction was provided to pupils with serious reading problems. During the school year, 15 sites were observed by the evaluator. Of the 3,200 project pupils, approximately 2,000 received ongoing weekly instruction.

The 11 established "A" reading centers continued to provide an individually prescribed reading program to pupils after assessment and diagnosis. The full-time reading teacher was assisted by two aides. Centers served pupils with the most severe reading problems, and provided enrichment lessons for more capable pupils and model lessons for their teachers. Pupils attended the centers from two to five times a week, depending on individual needs and their center's organization. Most instructional periods lasted from 45 to 60 minutes.

Two centers had to reorganize their programs at midyear because most pupils were transferred to Benchmark, another Title I compensatory project. This reduced by approximately 75 the number of pupils for whom complete data were available. Records of scores were collected from 1,052 pupils.

Shared-time "B" centers served pupils with serious reading problems in schools without reading centers, and also provided reading service to nonpublic schools. Each "B" teacher divided her time equally between a public school and a nonpublic school. Originally, each project teacher was skilled in reading instruction, but in recent years the criteria for teacher selection were relaxed. Since the majority of project schools were overcrowded, many of the classes were conducted in unsuitable areas.

The project was remedial, emphasizing individual and small-group instruction. Because teachers had responsibility in two schools and lower funding than the "A" centers, aides were not provided and the inventory of materials was lower.

Scores from 773 public and nonpublic school pupils were analyzed. Instructional time varied from two to five periods a week.

ATTAINMENT OF OBJECTIVES

Objective 1: Pupils provided instruction by this project three or more times a week during the 1974-1975 school year will improve their comprehension and vocabulary skills, as indicated by pretest and posttest administrations of an informal reading inventory. At least 75% will gain one book level and at least 55% will gain two book levels.

This objective was attained.

Pupils were pre- and posttested using informal reading inventories based on their basal series. All data were based upon the children's instructional reading levels, and pupils were assessed according to their skill levels, from Readiness to Book 6.

Results for 1,825 pupils were recorded on the Longitudinal Inventory for Student Achievement (LISA) form and analyzed. Data for pupils who took both the pretest and the posttest are shown in Table 1. Results revealed that project pupils improved their reading skills. Fifty-six percent gained two or more book levels (two book levels' gain is considered normal growth), and 33% gained at least one level. Thus, 89% gained one or more book levels, exceeding the 75% criterion.

Pupils enrolled for their first year exhibited higher gains than the second- and third-year groups (60%, 53%, and 48% respectively). Only 11% of the project pupils made no gains.

Objective 2: Pupils will improve their decoding skills by 20%, as measured by the 64-item Botel inventory administered in September and May.

This objective was attained.

A 64-item phonics inventory was administered to project pupils in September and May. Cue words were recited by the teacher, and pupils responded by writing the letter or letters of the sounds they heard. Items included initial and final consonants, blends, and vowels.

Gain scores are shown in Table 2. Thirty percent (446) of the pupils gained the criterion of 20 percentage points (13 items). An additional 28% gained between 10 and 19 points. Thirty percent of the pupils attained a 90% mastery of the phonics elements tested.

Objective 3: Reading specialists will provide consultation services to school staff as needed and will continue to share information, methods, and techniques with visitors and educators interested in the operation of the centers or the program.

This objective was attained.

Project teachers provided formal and informal consultation services to their school staffs. The teachers also provided model lessons and information, and answered questions posed by interested administrators, visiting teachers, and graduate students. Informal interviews conducted by the evaluator and records kept by the reading teachers indicated the attainment of this objective.

SUMMARY AND CONCLUSIONS

The Improvement of Reading Skills "A" and "B" project was instituted to help pupils with severe reading problems. The project assessed individual needs, prescribed treatments, and provided materials and supervision of instruction.

The evaluation design was based upon pre- and posttest data recorded by project teachers and the evaluator's observations. "A" and "B" components were implemented as intended.

All project objectives were attained. More than half the pupils gained two book levels--the gain expected of a normal reader. This was significant because the project pupils had previously exhibited serious reading problems.

Thirty percent of the pupils improved their phonics socres by at least 20 percentage points. Thirty percent gained a mastery of the phonics skills tested. These results indicated that substantial improvements were made by project pupils in reading skills.

Teachers provided information and materials to members of their school staffs and hosted groups of visitors in their reading centers.

The project continued to provide a successful remedial and instructional program for pupils with severe reading difficulties.

TABLE 1

SUMMARY OF PUPIL PROGRESS IN READING "A" AND "B" PROJECT FROM PRETEST TO POSTTEST

Change in IRI Score	Percentage of Participating Pupils			
	1st-year Pupils (N=642)	2nd-year Pupils (N=457)	3rd-year Pupils (N=278)	Three Groups (N=1,377)
Gain of 2 books or more	60.8%	53.6%	48.6%	55.9%
Gain of 1 book	29.1%	35.0%	38.1%	32.9%
Loss or no change	10.1%	11.4%	13.3%	11.2%

TABLE 2

PUPILS IN READING "A" AND "B" PROJECT WHOSE PHONICS INVENTORY SCORES INCREASED BY 13 POINTS OR MORE

Item	1st-year Pupils (N=794)	2nd-year Pupils (N=473)	3rd-year Pupils (N=231)	Three Groups (N=1,498)
Number	255	156	35	446
Percentage	32.1%	33.0%	15.2%	29.8%

IMPROVEMENT OF READING SKILLS "C"
(A Component of the COMPREHENSIVE READING PROJECT)

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

Part "C" of the Improvement of Reading Skills project provides reading teachers who give part-time remedial instruction to pupils with reading difficulties.

RATIONALE

The participating target-area pupils have failed to master the basic reading skills, and are reading below grade level. The project is based upon the assumption that supplementary services can ameliorate low achievement levels resulting from reading difficulties. Services are provided to improve the reading comprehension and word-attack skills of the participating pupils.

EXPECTED OUTCOMES

Through participation in the project, the pupils should improve their reading comprehension and their word-attack skills.

MODE OF OPERATION

Pupils in Grades 3-8 who have failed to master basic reading skills are admitted to the project on the basis of recommendation by their classroom teachers and screening by the reading teacher.

Each remedial reading lesson lasts approximately 45 to 60 minutes. The pupils engage in at least three activities which emphasize individual skill development.

Widely varied multilevel, multimodal materials are utilized for optimal development of specific skills. The pupils work in small groups; the reading teacher serves as a resource person. The schedules of the reading teachers are arranged to fit the programs of their respective schools. Each day, a reading teacher meets with three or four instructional groups, each consisting of 9 to 12 pupils. Two and one-half hours of the reading teacher's weekly schedule are devoted to intensive work with selected pupils.

PREVIOUS FINDINGS

The project has been successful in helping many children who had reading difficulties to make gains in comprehension and word-attack skills.

In previous years, the differences between pretest and posttest scores on informal reading inventories indicated that 66% of the pupils participating in the project improved their instructional reading levels at or above the rate specified in the objectives (two book levels per school year). In addition, substantial increases from fall to spring in the percentage of pupils attaining mastery on a phonics inventory indicated that the project consistently met its objective of increasing pupils' decoding skills.

THE 1974-1975 EVALUATION

This year's evaluation of Improvement of Reading Skills "C" focused on (a) the degree to which the participating pupils demonstrated increased reading-achievement levels, as indicated by differences between pretest and posttest scores on a group informal reading inventory, and (b) the degree to which the pupils improved their decoding skills, as indicated by scores on a project-specific phonics inventory.

IMPLEMENTATION

The project's intended mode of operation was fully implemented.

A project questionnaire provided information on pupil selection, emphasis of instruction, class organization, student needs, and communication with classroom teachers. Classroom observations by the evaluation team provided information on classroom organization and teacher behavior. Observations and responses to the questionnaire indicated that there was no substantial change in project operation from previous years.

In all schools, pupils received supplemental reading instruction three to four hours per week. In 26 of the centers, pupils received instruction three days a week, in six centers pupils met four days a week, and in one center pupils met five days a week. (One school had two centers.) Classes generally were 45 minutes to an hour in length. Class size usually ranged from seven to ten pupils. Pupils were assigned to the reading class by grade level. In schools where there were two or more classes per grade, pupils were assigned to the project class by reading level within the grade.

Thirty-three 45-minute observations were conducted by the evaluators. Each observation was divided into nine five-minute intervals. The Learning Environment Checklist was used to systematically describe the facts and characteristics of the instructional system employed in each reading classroom. In 70% of the intervals, the classes were organized as whole groups with all pupils working on the same task. The teacher actively assisted groups of pupils 40% of the time, directed (lectured) the whole class 31% of the time, and 29% of the time was available for guidance. Widely varied materials were utilized for specific skill development. During a lesson, pupils usually engaged in at least three different activities.

Questionnaire responses by teachers indicated that pupils were selected for participation in the project on the basis of classroom-teacher recommendation, low IRI and phonics-inventory scores, previous participation in the project, and recommendations of school personnel other than the reading teacher. Pupils selected for the project were usually two or more years below grade level. The two areas where most project pupils had reading difficulties were comprehension and word-attack skills; these also were the areas where pupils received the most instruction.

Communication between project and classroom teachers usually consisted of discussions when a pupil entered or left the project and at other times if necessary, and a written report to the classroom teacher. Both project and classroom teachers participated in diagnosing pupil deficiencies.

ATTAINMENT OF OBJECTIVES

Objective 1: To increase project pupils' reading-achievement levels to the extent that 90% of the pupils gain one book level and 60% gain two or more book levels in a school year, as measured by pretest and posttest scores on a group informal reading inventory.

The objective was fully attained. Ninety-five percent of the pupils gained at least one book level; 76% gained at least two levels.

Informal reading inventories were administered in September and May. The median pretest and posttest book-level scores in each grade are reported in Table 1. The number of pupils in each grade who made the specified gains between pretest and posttest are shown in Table 2.

Objective 2: To increase project pupils' decoding skills to the extent that there is an increase of 20 points in the percentage of pupils attaining an 80% mastery score on a project-specific phonics inventory.

The objective was fully attained. There was an increase of 53 points in the percentage of pupils attaining mastery on the phonics inventory.

In September and May, 85-item project-specific phonics inventories were administered to the pupils. Results for each grade are shown in Table 3.

SUMMARY AND CONCLUSIONS

Part "C" of the Improvement of Reading Skills project, which provided part-time remedial reading instruction, was fully implemented. The evaluation team found it well organized, making efficient use of its resources.

All project objectives were fully attained. On a group informal reading inventory, 95% of the project pupils (not just the specified 90%) gained at least one book level, and 76% (not just the expected 60%) gained at least two book levels during the school year. The criterion for phonics mastery (a 20-point gain in the percentage of pupils attaining mastery) was exceeded by a margin of 33 points. Small-group remedial reading instruction provided by the project was successful in helping many children who exhibited reading difficulties.

TABLE 1

IMPROVEMENT OF READING SKILLS "C":
IRI BOOK-LEVEL SCORES

Grade	No. of Pupils	Pretest Median	Posttest Median	Book Levels Gained
3	213	Book 1	Book 2^2	2
4	392	Book 2^1	Book 3^1	2
5	291	Book 2^2	Book 3^2	2
6	180	Book 4^1	Book 6^1	4
7	67	Book 5^1	Book 6^1	2
8	24	Book 5^1	Book 6^1	2

TABLE 2

IMPROVEMENT OF READING SKILLS "C": SUMMARY OF GAINS ON IRI SEPTEMBER TO MAY

Grade	No. of Pupils	Pupils Making No Gain		Pupils Gaining One Level		Pupils Gaining Two or More Levels	
		N	%	N	%	N	%
3	213	4	2	42	20	167	78
4	392	17	4	79	20	296	76
5	291	11	4	68	23	212	73
6	180	10	6	21	12	149	82
7	67	11	16	10	15	46	69
8	24	2	8	4	17	18	75
Total	1,167	55	5	224	19	888	76

TABLE 3

IMPROVEMENT OF READING SKILLS "C": PERCENTAGE OF PUPILS ATTAINING MASTERY ON PHONICS INVENTORY

Grade	No. of Pupils	September Pretest	May Posttest	Increase in Percentage
3	213	1%	65%	64
4	392	12	76	64
5	291	33	88	55
6	180	57	83	26
7	67	61	93	32
8	24	46	83	37
Total	1,167	26%	79%	53

INDIVIDUALIZED EDUCATION CENTER
(A Component of the COMPREHENSIVE READING PROJECT)

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

The Individualized Education Center provides a compensatory program for pupils in St. Mary's Interparochial School, focusing on diagnosis and remediation of their weaknesses in language arts and mathematics.

RATIONALE

Pupils attending the Individualized Education Center have varied ethnic and social-class backgrounds: there are affluent whites from the St. Mary's parish, poverty-stricken blacks from the Our Lady of the Blessed Sacrament parish, and pupils from Spanish-speaking families. The result is an experiment in voluntary integration of children bussed from different neighborhoods within the city.

The complex makeup of the pupil population requires the project's staff members to commit themselves to a philosophy and program of education which encourages the development of each pupil's self-esteem and appreciation of the worth of others. The staff attempts to develop each child's sense of social justice and responsibility by promoting self-directed learning experiences through specific remedial activities intended to correct the individual pupil's diagnosed weaknesses.

EXPECTED OUTCOMES

Through individualization of instructional practices, IEC aims for the improvement of pupil performance in basic skills, and the development of positive attitudes toward self and toward school.

MODE OF OPERATION

The center is organized to provide an optimal degree of individualized instruction in language arts and mathematics, using a wide variety of multimedia and multilevel instructional materials. Integral parts of the instructional plan are diagnosis of each pupil's learning weaknesses and prescription of specific activities designed to remediate them. The measurement of pupil progress is individualized by setting attainable goals for each pupil, by avoiding peer comparisons, and by using the Continuous Progress Program and the Fountain Valley Teacher Support System provided by the Archdiocese of Philadelphia. The end-of-year report is a detailed narrative which describes each pupil's strengths and weaknesses.

PREVIOUS FINDINGS

During its initial years (1968-1970) the project was evaluated by the coordinator of nonpublic school Title I projects. The evaluations were formative and revealed that the enabling objectives had been attained.

Beginning with the 1970-1971 school year, the evaluation focused on the degree of individualization of instructional practices. Attempts to individualize instruction through innovative class structure and teaching methods were observed. During subsequent years (1971-1972, 1972-1973), continued attempts to individualize instruction were hindered by a number of factors: (a) high staff turnover rate, (b) a change of principals, (c) fluctuation in pupil enrollment, (d) some scheduling difficulties, and (e) a limited budget for instructional materials. During these years, instructional differentiation was maintained through use of multiple-group settings.

From 1970 through June 1973, the development of basic academic skills was evaluated by use of the Iowa Tests of Basic Skills (ITBS). The average IEC pupil improved sufficiently from year to year to maintain his/her standing in relation to national norms. (The national norms required an annual gain of approximately seven months.)

In 1973-1974, systematic observations of IEC classrooms revealed that in all observed classes the teachers attempted to provide individualized instruction through effective grouping procedures, teacher-directed and pupil-selected individual activities, and the judicious use of a wide variety of available multimedia equipment and instructional materials. IEC pupils generally reported positive attitudes toward their school experiences and a positive self-concept. ITBS results revealed average gains in grade-equivalent score ranging from one month to 15 months between June 1973 and March 1974 for the Arithmetic Skills, Reading Comprehension, and Vocabulary subtests. Excluding the three-month summer recess, this period included roughly six instructional months. However, the norms provided by the publisher of the test for these testing periods (and based on the questionable inference of cognitive growth during the summer recess) indicated that actual gains failed to maintain the pupils' relative standing with the norming population in 14 of 20 instances.

THE 1974-1975 EVALUATION

As in recent years, the IEC evaluation during the current year focused upon the level of instructional differentiation, the development of the pupils' basic academic skills, and the attitudes of IEC pupils toward themselves and toward school.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. Seven of the eight IEC teachers and all six experienced parent aides returned for the current school year. The negligible loss of personnel for the second consecutive year contributed to the project's successful implementation of individualized instruction early in the school year.

Grades 1-4 functioned as self-contained classes, and Grades 5-8 were departmentalized classes. Instructional materials and multimedia equipment were available in each classroom to provide appropriate learning experiences for all pupils according to their instructional levels. IEC continued to receive the services of a full-time reading teacher and indirect benefits from other Title I projects (Parent School Aides, Multimedia Center, Education in World Affairs, Counseling Services). All eight teachers received a minimum of two daily hours of aide assistance during reading, language-arts, and mathematics classes. Some teachers received as much as five hours of aide assistance a day.

An intensive tutoring program involving students from a local college was observed by the evaluator. The extensive use of peer and cross-age tutoring was also observed. Teachers informally reported that these tutoring experiences were beneficial for both tutors and tutees.

IEC teachers were observed using the Fountain Valley Teacher Support System, instituted by the Archdiocese of Philadelphia in all parochial schools. The system, consisting of behavioral objectives, self-scoring tests, audio cassettes, teaching alternatives, and continuous pupil-progress profiles, was informally reported to have aided the IEC staff in individualizing instruction.

ATTAINMENT OF OBJECTIVES

Objective 1: To maintain and/or improve the national percentile ranks of the project pupils in reading, as evidenced by annual scores on the Vocabulary and Comprehension sections of the California Achievement Tests.

This objective was partially attained. All grades except two maintained their national percentile rank on the Comprehension section; all but one maintained their national percentile rank on the Vocabulary section.

The Comprehension and Vocabulary sections of the California Achievement Tests (CAT-70) were administered to 186 project pupils in Grades 1-8 in May 1975. Each grade's mean score was converted to the corresponding individual-pupil national percentile rank in the publisher's norm tables. On the basis of a comparability study conducted by the Office of Research and Evaluation, March 1974 ITBS mean scores were converted to "predicted CAT scores," which were then further converted to CAT national percentile ranks. Percentile ranks for the two years are shown in Table 1.

In vocabulary, Grades 4, 5, 6, and 7 maintained or improved their national percentile ranks; Grade 8 did not. In comprehension, Grades 5, 6, and 7 maintained or improved their national percentile ranks; Grades 4 and 8 did not.

Objective 2: To maintain and/or improve the national percentile ranks of the project pupils in mathematics, as evidenced by annual scores on the Computation and Concepts/Problems sections of the California Achievement Tests.

This objective was partially attained. All grades except one maintained their national percentile rank on the Concepts/Problems section. Computation achievement could not be determined because no ITBS subtest was directly comparable with the CAT Computation section.

The Computation and Concepts/Problems sections of CAT-70 were administered to all project pupils in May 1975. By means of the score-conversion procedures used in treating Objective 1, the current year's CAT-70 results were compared with the previous year's scores derived from the ITBS. National percentile ranks for each grade are shown in Table 2. On the Concepts/Problems section, Grades 5, 6, 7, and 8 maintained or improved their national percentile ranks; Grade 4 did not.

Objective 3: To develop positive attitudes toward school and self, as measured by an attitude-rating scale, the Pupil Opinionnaire (Forms A and B).

This objective was attained.

The Pupil Opinionnaire, a relative indicator of pupil attitude toward school and self, was administered to all IEC pupils in May. The Opinionnaire was described in the 1973-1974 evaluation of the project.

Sixty-five pupils completed Opinionnaire Form B (primary level) and 115 pupils completed Form A (intermediate level). Each pupil's subscale score was compared with a criterion score based on the midpoint among the subscale's response options, in order to determine in a general sense the positive or negative attitudes toward school and self expressed by the pupils.

Mean scores on the three subscales of Form B are shown in Table 3. In every primary grade, the mean score for each subscale exceeded the respective criterion. The number of pupils in each grade whose numerical scores exceeded the criterion for each subscale is shown in Table 4. In every primary grade, at least 76% of the pupils exceeded the criterion score for each subscale.

Mean scores for the three subscales of Opinionnaire Form A are given in Table 5. In every grade, the mean score for each subscale exceeded the respective criterion. The number of pupils in each grade whose numerical scores exceeded the criterion for each subscale is shown in Table 6. In every middle and upper elementary grade, at least 53% of the pupils exceeded the criterion score for each subscale.

Data presented in Tables 3-6 indicate that IEC participants developed positive attitudes toward school and self.

Objective 4: To develop and/or implement an individualized instructional system in the basic academic skill areas (language arts and mathematics) which focuses upon the diagnosis and remediation of individual learning difficulties.

This objective was attained.

Observations were conducted three times during the school year (October, February, May) using the Learning Environment Checklist to describe the instructional system in project classrooms. Major characteristics included in the checklist were (a) classroom organization, (b) instructional differentiation level, (c) teacher role, (d) paraprofessional activities, (e) pupil activities, and (f) pupil attitudes. Forty-minute observation periods were divided into eight consecutive five-minute intervals, during which judgments for each of the six characteristics were recorded.

Findings from the 32 40-minute observations are shown in Tables 7-11. In approximately two thirds of the observations, the evaluator observed some combination of groups and individuals completing different tasks. The teacher's primary role was presenter of information, and paraprofessionals primarily supervised or assisted individuals or small groups of pupils.

Generally, teachers of observed IEC classes attempted to provide individualized instruction using effective grouping procedures, teacher-directed and pupil-selected individual activities, multimedia equipment, and instructional materials.

SUMMARY AND CONCLUSIONS

The Individualized Education Center at St. Mary's Interparochial School uses various self-directed remedial activities to correct pupils' academic weaknesses. An apparent success in voluntary integration of children bussed from different neighborhoods of the city, the project attempts also to develop in each child a sense of social justice and responsibility.

The current year's evaluation employed extensive classroom observations, which revealed that an individualized instructional system was implemented in language-arts and mathematics classes. This implementation occurred early in the school year, because staff turnover was minimal.

Results of administering the CAT-70 showed that the project's reading- and mathematics-achievement objectives were partially attained. Average gains in grade-equivalent score ranging from four months to more than two years between March 1974 and May 1975 were sufficient to maintain or improve national percentile ranks in seven of 10 instances. On the Pupil Opinionnaire, IEC participants reported generally positive self-concepts and positive attitudes toward their school experiences.

The Individualized Education Center continues to serve as a model of successful integration by bussing children from various parts of the city and by providing them with a compensatory program which diagnoses and remediates their academic weaknesses.

Much of the project's current success may be attributed to the lack of staff turnover during the past two years. Prior to 1973-1974, the project had been faced with many new teachers in September who devoted a great amount of time and energy to learning the philosophy and practices of individualization. Under those circumstances, implementation of individualized instruction was delayed.

TABLE 1

1974 AND 1975 PERCENTILE RANKS AND GE GAINS
BASED ON MEAN SCORES OF SAME IEC PUPILS
ON READING SECTIONS OF CAT-70*

1975 Grade Level	Vocabulary			Comprehension		
	Percentile Rank		GE Gain	Percentile Rank		GE Gain
	1974	1975		1974	1975	
1	--	58	---	--	77	---
2	--	57	---	--	63	---
3	--	50	---	--	56	---
4	36	37	0.9	48	36	0.4
5	26	43	2.0	17	44	2.3
6	30	36	1.1	38	44	1.0
7	18	30	2.0	36	44	1.9
8	40	32	0.4	50	46	0.8

*The 1974 data used in preparing this table were "predicted CAT scores" corresponding to the pupils' actual scores on Iowa Tests of Basic Skills. The 1974 Iowa testing did not include Grades K-2.

TABLE 2

1974 AND 1975 PERCENTILE RANKS AND GE GAINS BASED ON MEAN SCORES OF SAME IEC PUPILS ON MATHEMATICS SECTIONS OF CAT-70*

1975 Grade Level	Computation**			Concepts/Problems		
	Percentile Rank		GE Gain	Percentile Rank		GE Gain
	1974	1975		1974	1975	
1	--	53	---	--	59	---
2	--	53	---	--	52	---
3	--	60	---	--	65	---
4	--	24	---	--	45	---
5	--	47	---	48	45	0.7
6	--	42	---	48	52	1.3
7	--	25	---	43	43	0.9
8	--	50	---	33	33	1.4
				48	48	1.0

*The 1974 data used in preparing this table were "predicted CAT scores" corresponding to the pupils' actual scores on Iowa Tests of Basic Skills. The 1974 Iowa testing did not include Grades K-2.

**No Iowa subtest score is directly comparable with the CAT-70 Computation score.

TABLE 3

MEAN SCORES OF IEC PUPILS ON SUBSCALES OF PUPIL OPINIONNAIRE, FORM B

Grade	Creative Tendency (Criterion: 32)	Self-Concept (Criterion: 32)	Attitude toward School (Criterion: 16)
1	37.9	38.6	20.0
2	36.0	38.0	19.0
3	36.8	37.1	19.5

TABLE 4

NUMBER OF IEC PUPILS SCORING ABOVE CRITERION ON PUPIL OPINIONNAIRE SUBSCALES, FORM B

Grade and Number Tested	Creative Tendency	Self-Concept	Attitude toward School
1 (18)	17 (94%)	16 (89%)	16 (89%)
2 (21)	17 (81%)	20 (95%)	16 (76%)
3 (26)	21 (81%)	22 (85%)	23 (88%)

TABLE 5

MEAN SCORES OF IEC PUPILS ON SUBSCALES OF PUPIL OPINIONNAIRE, FORM A

Grade	Creative Tendency (Criterion: 117)	Self-Concept (Criterion: 72)	Attitude toward School (Criterion: 24)
4	141.5	79.5	26.8
5	146.1	83.4	26.7
6	142.3	86.9	28.8
7	148.7	84.4	29.5
8	144.9	80.8	27.1

TABLE 6

NUMBER OF IEC PUPILS SCORING ABOVE CRITERION ON PUPIL OPINIONNAIRE SUBSCALES, FORM A

Grade and Number Tested	Creative Tendency	Self-Concept	Attitude toward School
4 (26)	26 (100%)	22 (85%)	18 (69%)
5 (17)	17 (100%)	16 (94%)	9 (53%)
6 (22)	20 (91%)	18 (82%)	18 (82%)
7 (22)	22 (100%)	22 (100%)	17 (77%)
8 (28)	28 (100%)	23 (82%)	20 (71%)

TABLE 7

CLASSROOM ORGANIZATIONS OBSERVED IN INDIVIDUALIZED EDUCATION CENTER

Organization	Five-Minute Observation Periods	
	Number	Percentage
Whole Class	15	6%
Two Groups	10	4
More than Two Groups	53	21
Group(s) and Individuals	170	65
Individuals	6	2
Undetermined	5	2

TABLE 8

DIFFERENTIATION OF INSTRUCTION OBSERVED IN INDIVIDUALIZED EDUCATION CENTER

Level of Differentiation	Five-Minute Observation Periods	
	Number	Percentage
Whole Class with Same Task	15	6%
Two or More Groups with Different Tasks	52	20
One or More Groups plus Individuals, All with Different Tasks	174	67
Individuals: All Pupils in the Class with Different Tasks	12	5
Undetermined	6	2

TABLE 9

TEACHER ROLES OBSERVED IN IEC CLASSES

Role	Five-Minute Observation Periods	
	Number	Percentage
Passive: Available for Guidance	4	2%
Actively Guiding/Assisting Groups or Individuals	71	27
Presenting Information to Groups or Individuals	161	62
Directing/Lecturing Whole Class	12	5
Performing Administrative Tasks	11	4
Not Available	0	0

TABLE 10

ACTIVITIES OF PARAPROFESSIONALS OBSERVED IN IEC CLASSES

Activity	Five-Minute Observation Periods	
	Number	Percentage
Supervising/Assisting Groups of More than 10 Pupils	13	5%
Supervising/Assisting Groups of 2-10 Pupils	88	34
Supervising/Assisting Individuals	60	23
Performing Clerical/Administrative Tasks	21	8
Unstructured Time	8	3
Absent or Not Available	69	27

TABLE 11

ACTIVITIES OF PUPILS OBSERVED IN IEC CLASSES

Activity	Five-Minute Observation Periods	
	Number	Percentage
Inappropriate Activity	1	1%
Waiting or Moving	16	6
Getting/Returning Materials	14	5
Group Activity	167	64
Individual Activity	61	24

INSTRUCTIONAL MATERIALS CENTERS
(A Component of the COMPREHENSIVE READING PROJECT)

The Instructional Materials Centers project provides library assistants to service instructional materials centers in target regular, bilingual, and special education schools, most of which have either large enrollments or no assigned librarians.

RATIONALE

Instructional materials centers in schools are resource areas for books, audio-visual equipment, tapes, records, and films. Library assistants organize the materials, keep records, and assist teachers and children who use the centers. The IMC project has been included in the School District's Comprehensive Reading Project because libraries and IMCs, as depositories of information, have long been recognized as important tools in the learning process. The reading program is supported and enhanced when the potential resources of the IMC are thus made available to the students and staff. In addition to the regular target schools, Spanish-speaking library assistants work with Spanish-speaking children in IMCs in bilingual schools. Library assistants also provide services in IMCs in target special education schools. Without the services of these assistants, 56 of the target-school IMCs would be operated only by volunteers or users, or would be closed. Ten of these IMCs, in schools with a very large pupil population, though staffed with librarians, would not be able to provide extensive and intensive services without the help of the library assistant (LA).

EXPECTED OUTCOMES

It is expected that the circulation of IMC materials will increase significantly because of the LAs' efforts. This, in turn, will have impact upon the schools' reading program. With Spanish-speaking LAs in bilingual schools, Spanish-speaking children will be motivated to utilize the IMC more often and thus improve their skills. With LAs available to staff the IMCs in special education schools, the teachers will become able to make use of the IMCs in helping special education children to read.

MODE OF OPERATION

Instructional Materials Centers in Title I schools are maintained and operated by library assistants under the direction of district IMC supervisors and central library personnel.

The IMC is open during school hours, and in most cases LAs provide services before and after school. Books, audiovisual equipment, tapes, records, and films are provided for teachers and their classes. Book lists are distributed, and card catalogs are maintained. IMCs are kept interesting and attractive through the use of various displays and decor. The LAs attempt to increase communication with teachers, and especially with the reading teacher. Supervisors provide the LAs with consultations, on-the-job training, staff-development sessions, and other assistance.

The project model calls for 66 LAs to be assigned to 66 target-area elementary schools: 10 of them are assigned to work under the direction of professional librarians in target-area schools; 31 are assigned to work as team members in schools where another LA is present; nine are assigned to maintain by themselves the IMC in special education schools; and 16 Spanish-speaking LAs are assigned to bilingual schools where either a librarian or another LA is present. Thirty additional Title I LAs are assigned to secondary schools to assist a professional librarian.

PREVIOUS FINDINGS

In 1970-1971, only 44% of the IMCs observed had full-time librarians. In the next two years, most of the facilities observed were found attractive and well equipped; only rarely were community volunteers found staffing the IMCs.

In 1973-1974, LAs were providing teachers and pupils with materials and resources supporting the Comprehensive Reading Program. It was also ascertained that if the services of the LAs were reduced, many facilities would be unable to function adequately, if at all.

THE 1974-1975 EVALUATION

The current evaluation of the Instructional Materials Centers project focused on the assimilation and use of the new LAs in the elementary schools. Weekly activity logs submitted by elementary LAs were reviewed on an ongoing basis. Systematic monitoring, observations, and questionnaires to principals and LAs provided further information about the role and function of LAs in the various Title I schools. The project's junior and senior high school components were not evaluated in 1974-1975.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. The expanded IMC project was fully operational in January 1975. Fifty-six new LAs were hired and 10 experienced LAs reassigned within the project--31 second LAs in schools with an enrollment of 900 or more, 16 bilingual second assistants in schools with a minimum of 25% of children with Spanish surnames, 10 in schools that had full-time librarians, and nine in special-education schools. Thirty junior and senior high schools that had LAs assigned to the librarian in previous years continued that service.

The evaluation team made 21 systematic observations, averaging 50 minutes each, from February until May. To determine how LAs function in IMCs, data were collected using a 30-category observational checklist developed for use in this project. Evaluators observed seven of the 21 LAs reading to individuals or groups of children. Six of the LAs were observed operating audiovisual equipment. The LA was observed working with either a librarian or a second LA in 17 visits.

The teacher remained with her class in the IMC during 16 of the 21 observations. During five observations, no class was present in the IMC. In 19 observations, children were working in the IMC individually, in small groups, or as a class.

ATTAINMENT OF OBJECTIVES

Objective 1: The library assistant assigned to a regular, bilingual, or special education school will assist the school's reading program by performing clerical and mechanical tasks which are needed to organize and maintain an IMC to ensure availability of instructional and reading materials in the IMC for immediate use by teachers and children.

This objective was attained.

Data were gathered from a questionnaire completed by 55 aides and 30 principals, indicating how often the LA performed 48 different tasks. To ascertain the actual daily time spent on 14 major activities, LAs were randomly assigned to maintain weekly logs. LAs were trained by the evaluation team in January to maintain the special NCS computerized weekly log (Weekly Summary of Activities--Form 18-440). Every LA maintained the log for at least one week; 29 LAs maintained it for a two-week period. A VALTREP program transferred the data from the NCS forms to a computer tape. A custom-designed program converted the data for the 14 activities to minutes, averaged the number of minutes for each activity across all LAs, and converted the minutes to percentages of a week's time. The 85 logs that were submitted showed how aides divided their time among 14 activities, and the number of teachers, classes, and grades they served.

LAs' and principals' reports of the frequency with which LAs performed specific duties are summarized in Table 1. The average daily time that LAs spent on 14 major activities is shown in Table 2.

Nearly all of the principals and LAs reported that the LA often helped children find materials in the IMC; in 13 of the 21 visited schools, evaluators observed this activity occurring. Five sixths of the principals and LAs responded that LAs often helped teachers find materials. Most principals and LAs reported that LAs had excellent working relationships with teachers or reading specialists. Only six of the 30 principals reported that because of space shortage in the school, the LA frequently arranged for the library/IMC to be used as a classroom.

The average LA in a regular, bilingual, or special education school frequently unpacked and collated books and other materials, performed clerical and housekeeping duties, circulated library materials, and operated audiovisual equipment. When a librarian was present, the LA assisted her directly in maintaining the IMC. The activities that LAs frequently performed ensured the availability of instructional and reading materials for immediate use by teachers and children; thus this objective was attained.

Objective 2: The library assistant will semiannually provide teachers, children, and parents with a list of recommended books and materials for various reading and interest levels and with a brief description of the contents of those materials.

This objective was not attained.

Because new LAs were not hired before January, they were unable to provide the two lists. Furthermore, the evaluators found that in only a few schools did the LA distribute even one such list. LAs' weekly logs indicated that 2% of their average daily time was spent compiling reading lists. Of the 55 LAs, 35 (64%) reported on questionnaires that they compiled reading lists occasionally or not at all, and 18 (60%) of the 30 principals concurred.

Objective 3: The library assistant will set up a record-level file, arranged according to each book's approximate reading level. This file will be used in conjunction with the regular card catalog or as a supplementary system.

This objective was partially attained.

In 14 (67%) of the 21 observed schools, LAs either had established or were in the process of establishing a record-level file. Weekly summaries of LAs' activity logs indicated that only a small segment of their average daily time (3%) was devoted to record-level files. Also, 35 (64%) of the LAs responded that LAs were setting up a record-level file, and 19 (63%) of the principals concurred.

Objective 4: The library assistant will motivate children to borrow books from the IMC by setting up, at least three times per year, attractive book displays based on central themes.

This objective was attained.

LAs were directed to set up library or hall displays on three central themes--Fairy Tales (February), Hobbies (April), and Meet the Stars (May). Circulation and request figures for books on these themes were recorded for the month prior to the display, and were compared with figures for the month when the display was exhibited. A t test was used to determine whether the number of books borrowed from the library increased significantly during the displays. Results are summarized in Table 3.

More books in regard to the central themes circulated during the four-week periods of the displays than during comparable four-week periods preceding them. The difference was statistically significant for two themes, Fairy Tales and Hobbies. Many LAs reported that they did not have enough planning time to carry out the Meet the Stars display. However, since the three book displays were set up, this objective was attained.

Objective 5: In order to enhance the school's reading program, four staff-development programs will be provided for library assistants during the 1974-1975 school year.

This objective was attained.

District library supervisors and central staff held four staff-development sessions for LAs, which taught them how to provide supportive services for school reading programs.

Objective 6: The library assistant assigned to a school that has a minimum of 25% enrollment of children with Spanish surnames (a) will assist Spanish-speaking children in the selection of materials in English and/or in Spanish, and (b) will make available, for parents and children, Spanish library and reading materials intended to enhance and preserve the Spanish culture and thus provide a sense of pride and self-identification.

This objective was attained.

On a questionnaire, all 16 LAs in bilingual schools responded that they frequently assisted Spanish-speaking children in the selection of materials in English and/or Spanish. All seven principals in bilingual schools who responded noted that their LAs performed this duty frequently. In only one of four observations did the evaluators observe bilingual LAs assisting Spanish-speaking students. During the other three, however, the LA showed a film and/or discussed a story with Spanish-speaking children.

In the four IMCs in bilingual schools, the evaluators observed Spanish library and reading materials which were made available to parents and children by the LA. However, schools greatly varied in the amount and reading difficulty of the materials intended for student use. The 16 bilingual LAs and seven principals all noted on questionnaires that the LAs "frequently" made Spanish library and reading materials available to parents and children.

SUMMARY AND CONCLUSIONS

Project implementation was completed in January with the hiring of 56 new elementary school library assistants. Nine of the LAs served special education schools which never before had anyone to maintain their IMCs. Sixteen bilingual

LAs were in schools which previously had no bilingual LAs to serve their Spani
speaking students. Thirty-one LAs served as second LAs in schools with at lea
900 students.

Four of the six objectives were fully attained. LAs performed the clerical
mechanical tasks that are necessary for the organization and maintenance of an
Book displays on central themes led to significantly greater circulation of books on those themes. Four staff-development sessions were conducted for the LAs on how to provide supportive services for the school's reading program
In bilingual schools, special assistance was given to Spanish-speaking children and their parents in the selection of reading materials in English and/or in Spanish. The objective of providing semiannual lists of recommended books and other materials was not attained, partly because of unfilled LA positions in the fall. The objective of setting up record-level files was partially attained
two thirds of the observed LAs had accomplished this task.

TABLE 1

PERCEPTIONS OF LIBRARY ASSISTANTS' SERVICES IN IMC PROJECT

Type of Service	Percentage of Respondents Indicating LA Renders Service					
	55 Library Assistants			30 Principals		
	Frequently	Occasionally	Never	Frequently	Occasionally	Never
Type orders	35%	38%	27%	37%	27%	36%
Unpack/check orders	69	24	7	67	17	16
Collate books	60	29	11	60	13	27
Process new materials	75	20	5	63	13	24
Type/arrange book packets	75	16	9	63	10	27
Type cards for catalog/shelf	35	40	25	37	30	33
Accession new material	84	11	5	63	17	20
File cards/correspondence	92	4	4	70	17	13
Label materials	58	29	13	63	13	24
Circulate library materials	96	2	2	77	7	16
Schedule AV equipment/materials	66	18	16	67	10	23
Provide resources to teachers	46	38	16	50	27	23
File periodicals	41	35	24	47	27	26

TABLE 1 (Continued)

PERCEPTIONS OF LIBRARY ASSISTANTS' SERVICES IN IMC PROJECT

Type of Service	Percentage of Respondents Indicating LA Renders Service					
	55 Library Assistants			30 Principals		
	Frequently	Occasionally	Never	Frequently	Occasionally	Never
Reinforce materials	35%	41%	24%	27%	37%	36%
Clip newspapers/magazines	18	42	40	10	46	44
Mount pictures/clippings	25	53	22	13	47	40
Check attendance, record circulation	44	31	25	36	31	33
Take inventory	35	41	24	43	27	30
Send overdue notices	58	22	20	43	23	34
Maintain statistical records	38	42	20	37	20	43
Set up vertical files	33	43	24	33	34	33
Set up reading-level catalog	44	20	36	43	20	37
Direct student library aides	40	31	29	33	30	37
Clean/mend materials	66	29	5	67	13	20
Mimeo/duplicate materials	33	47	20	43	30	27
Do housekeeping tasks	90	6	4	80	3	17
Operate AV equipment	75	16	9	53	20	27

TABLE 1 (Continued)

PERCEPTIONS OF LIBRARY ASSISTANTS' SERVICES IN IMC PROJECT

Type of Service	Percentage of Respondents Indicating LA Renders Service					
	55 Library Assistants			30 Principals		
	Frequently	Occasionally	Never	Frequently	Occasionally	Never
Read story to children	54%	35%	11%	53%	27%	20%
Help children find materials	94	4	2	93	0	7
Help teachers find materials	83	15	2	83	10	7
Make Spanish materials available	33	7	60	37	7	56
Assist librarian	76	0	24	57	0	43
Assist children in Special Education classes	67	18	15	67	17	16
Provide semiannual list of recommended books	36	31	33	40	17	43
Assist teachers/children in special reading projects	47	38	15	53	17	30
Locate/distribute reading materials to classrooms	56	24	20	47	27	26
Distribute materials for class visits	68	26	6	60	20	20

TABLE 1 (Continued)

PERCEPTIONS OF LIBRARY ASSISTANTS' SERVICES IN IMC PROJECT

Type of Service	Percentage of Respondents Indicating LA Renders Service					
	55 Library Assistants			30 Principals		
	Frequently	Occasionally	Never	Frequently	Occasionally	Never
Provide materials for reading committee	33%	29%	38%	33%	20%	47
Publicize LA's services for teacher/children	56	29	15	53	27	20
Provide teachers with file of "read-aloud" items	42	33	25	27	33	40
Announce new materials at faculty meetings	31	27	42	33	17	50
Assist specialist teachers in implementing ancillary reading projects	38	53	9	40	30	30
Provide decoding material	36	24	40	47	13	40
Establish working relationship with reading person	75	18	7	67	13	20
Arrange for using IMC as classroom	27	16	57	20	10	70

TABLE 2

MINUTES SPENT DAILY IN VARIOUS ACTIVITIES BY ELEMENTARY IMC LIBRARY ASSISTANTS

Activity	25% of LAs Spent Less than	Median No. of Minutes	25% of LAs Spent More than
Helping children find materials	20	49	89
Shelving	29	45	67
Circulating books, software, hardware	23	44	76
Preparing or setting up bulletin boards and displays	8	21	48
Packing/unpacking/checking or processing IMC materials	7	20	43
Operating AV equipment in IMC	7	18	40
Filing	6	18	36
Housekeeping	6	17	32
Typing	5	15	26
Locating/preparing/distributing reading materials for teachers	4	13	22
Inventorying/requisitioning	4	13	22
Duplicating materials for IMC	3	11	18

TABLE 3

CIRCULATION OF BOOKS ON THEMES PUBLICIZED THROUGH IMC BOOK EXHIBITS

Theme	Number of Schools	Circulation per Book				t
		Month before Exhibit		Month of Exhibit		
		Mean	S.D.	Mean	S.D.	
Fairy Tales	37	1.1	1.58	1.9	1.46	2.11*
Hobbies	30	1.0	0.93	2.2	1.66	3.22**
Meet the Stars	19	1.7	3.30	2.2	1.90	0.52
All Themes	--	1.2	1.95	2.1	1.63	3.12*

*Significant at the .025 level.
**Significant at the .005 level.

KINDERGARTEN AIDES

(A Component of the COMPREHENSIVE READING PROJECT)

The project provides aides in kindergarten classrooms, thereby enabling teachers to individualize instruction and to develop better teacher/pupil rapport.

RATIONALE

In Philadelphia, target-area pupils tend to score substantially below national norms on standardized tests. Many of the Title I schools are at peak enrollment or are overcrowded. The KA project was developed to enhance the quality of education in these schools. Target-area schools need more individualization of instruction than other schools because of their higher proportion of pupils with learning disabilities.

Teachers whose classes are at peak enrollment or are overcrowded need supportive assistance if they are to give more attention to individuals and to small groups of pupils. The aides provide this supportive assistance, by relieving teachers of most of their routine clerical and housekeeping duties and by assisting them with small-group and individual instruction. With respect to classroom organization and classroom management, the addition of another adult allows greater flexibility in grouping and in differentiation of instruction.

EXPECTED OUTCOMES

With aides helping their teachers, children are expected to have more beneficial learning experiences, more personal supervision, more adult reinforcement, and more rapid feedback. The aides can be available to stimulate and encourage the pupils spontaneously or upon request. Because small-group learning and a wider range of activities are more feasible in classrooms with aides than in classrooms where the teacher is working alone, the teacher/aide teams can develop a learning environment that is suited to the pupils' varying needs.

Use of aides who live in the school neighborhood is expected to encourage communication between adults and pupils that is neither threatening nor misunderstood. The aides can help the kindergarten children to adjust to their school situations and can interpret some aspects of their classroom behavior to the teachers.

MODE OF OPERATION

Because school size and needs vary, allocations vary from one to three aides per school. Through faculty meetings, workshops, and individual observations and evaluations, the kindergarten supervisors, along with the teachers and aides, seek to develop an organization which encourages greater involvement of the kindergarten teaching team.

The aides help small groups of children improve their basic reading and mathematics skills, by supervising instructional games in specific skill areas, conversing with children about their learning experiences at the various classroom interest centers to increase the children's oral communication, and aiding children in selecting and borrowing books from the classroom library.

The kindergarten aides follow teacher directions in assisting with audiovisual instruction, making bulletin-board displays, securing instructional materials, maintaining and preparing records and forms, and assisting with outdoor activities.

In-service sessions for aides alone, joint workshops for teachers and aides, and a September citywide orientation program assist teachers and aides in working together and upgrade the technical skills of the aides.

PREVIOUS FINDINGS

In the 1967-1968 and 1968-1969 evaluations, no significant differences were found between the readiness-test scores of pupils in classrooms with aides and pupils in classrooms without aides. More recently, it was found that by reducing the number of noninstructional tasks the teachers performed, aides increased the amount of time available for individualized and/or small-group instruction. The kindergarten aide program operated more efficiently than other aide programs, probably because kindergarten aides were assigned to only one grade, with minimal problems in deployment or supervision. Teachers used aides for instructional tasks more frequently than for noninstructional tasks.

In 1973-1974, teachers with aides were observed devoting more time to individual and small-group instruction than teachers without aides. The aide's presence led to less-frequent discipline incidents in KA classes than in non-KA classes, enabling the teacher to conduct her lesson uninterruptedly, and relieved the teacher of the housekeeping chores and clerical duties that were performed by non-KA teachers.

THE 1974-1975 EVALUATION

The current year's evaluation of the Kindergarten Aides project focused on the degree to which individual and small-group instruction was enhanced by the provision of aides to classroom teachers. Questionnaires were submitted to principals, teachers, and aides. Weekly activity logs submitted by project aides were reviewed on an ongoing basis. Extensive observations were conducted in kindergarten classes with and without aides.

IMPLEMENTATION

The project's intended mode of operation was fully implemented.

The role and function of kindergarten aides were described in questionnaire responses from 53 project teachers and 56 aides. Respondents indicated that 83% of the teachers received at least three hours of aide service in the morning or afternoon each day. Ninety-eight percent of the teachers believed that their aides were satisfied with assigned tasks, and 86% of the aides rated their project experience "good" to "excellent". Teachers and aides both indicated that aides had gained personal satisfaction, professional growth, and knowledge of academic and affective needs and development patterns of children.

Forty-seven of the 56 responding aides indicated that the classroom teacher supervised their work, four indicated the principal, and one aide indicated the reading teacher. Contributions of the aides to the overall education of pupils was rated "good" to "excellent" by 89% of the teachers. Working relationships between teachers and aides was favorably rated by 98% of the teachers and 91% of the aides. All responding teachers and aides felt that the educational program would be noticeably weakened and there would be less individual and small-group attention if the aides were not present. Thirty-six percent of the teachers expressed a desire for full-time aide service.

Eighteen percent of the aides said they wanted to continue their present work assignments next year. Nearly half the aides felt that the program would be strengthened if they could spend more time assisting children individually and in small groups, and 20% believed that they should be assisting children not only in reading but in all academic areas. Aides felt they most successfully worked with small groups and individual children, supervised them in arts, crafts, and games, and enhanced their self-image. Operating audiovisual equipment and disciplining children were areas where aides felt they were least successful.

Attendance records of a random sample of 67 of the 138 aides revealed that from September to May, 76% of the aides were absent 0-15 days, 13% were absent 16-25 days, and 11% were absent more than 25 days. Because substitute aides were not provided when regularly-assigned aides were absent, a reduction in services was experienced in classrooms served by aides with more than 15 absences.

In March 1975, approximately one third of the experienced aides were transferred to the Follow Through project and replaced by new aides. The replacements received training at periodic staff-development sessions led by the seven district kindergarten supervisors. Four in-service sessions for aides, two joint teacher-aide workshops, and a September citywide orientation program for aides were held. Responses to questionnaires administered at the end of the sessions indicated that aides felt the training was useful and would increase their effectiveness in working with small groups and individual children. Seven of 53 teachers expressed a desire for more frequent staff-development sessions for aides.

The evaluators observed that when teachers left the classroom for preparation time, their aides usually remained with the class and assisted the prep teacher. This provided desirable continuity in class management.

ATTAINMENT OF OBJECTIVES

Objective: To enable teachers to better implement an individualized and small-group instructional program, by providing kindergarten aides (a) serving only in the kindergarten, and (b) devoting at least 65% of their daily time primarily to supervising and/or tutoring individuals or small groups of children, not more than 15% of their time to clerical tasks (e.g., grading, record keeping) for the teacher, and not more than 20% of their time to such activities as class trips, operation of audiovisual equipment, and housekeeping tasks.

The objective was partially attained. Subobjective a was attained, and subobjective b was partially attained; the overall objective of enabling teachers to better implement individualized and small-group instructional programs was attained.

Each of the 138 aides was randomly assigned two separate weeks in the school year to maintain a log. Aides were trained by the evaluation team in the fall to maintain the special NCS computerized weekly log (Weekly Summary of Activities--Form 18-440). A VALTREP program transferred the data to a computer tape. A custom-designed program converted the data for the activities to minutes, averaged the number of minutes for each activity across all aides, and converted the minutes to percentages of weekly time. The 242 logs that were submitted showed how aides divided their time among 14 activities, and the number of teachers, classes, and grades they served.

The evaluation team observed 68 randomly-selected kindergarten classrooms in 55 schools; 48 classes had aides and 20 did not. Observations of how teachers and aides functioned were recorded according to the Scheiner Observation System (SOS), which enabled the evaluator to note 37 classroom activities that could be performed by the teacher alone, the aide alone, or both together, and the interaction among pupils, teachers, and/or aides. Each observation period lasted 50 minutes, and 37 variables were recorded in five-minute segments on a computerized coding sheet. A VALTREP program transferred the data to a computer tape. A customized computer program averaged the frequencies per observation period and performed one-way analysis of variance between classes with and without aides on the 37 variables.

The evaluation team interviewed 109 staff members in 43 project schools. Questionnaire responses of 53 project teachers and 56 aides also were examined.

It was ascertained from the logs that no aide served a grade other than kindergarten. Most of the aides were assigned exclusively to one teacher;

few aides were assigned to more than two teachers. The average aide daily served 1.9 classes (standard deviation = 0.54), and 1.6 teachers (standard deviation = 0.7). Thus subobjective a was attained.

Logs showed also that aides spent most of their daily time supervising and/or tutoring small groups (33.2%), individual children (24.2%), or the whole class (2.4%). However, the total time aides spent with individuals and/or groups of children was less than the specified minimum of 65%. Aides spent 12.1% of their time on clerical tasks, (less than the specified 15% maximum), and 21.6% (above the specified 20% maximum) on housekeeping, operation of audiovisual equipment, class trips, and working in lunch/breakfast programs. SOS observational data and teachers' questionnaire responses confirmed these findings. Thus subobjective b was partially attained.

Evaluator observations, summarized in Tables 1 and 2, indicated that the project's overall objective was attained. Project teachers performed more small- and large-group instruction, and significantly less whole-class instruction, lecturing, issuing of identical assignments, housekeeping and clerical tasks, and disciplining than nonproject teachers. Pupils' cooperation, rapport with teachers, interest, and involvement were judged "excellent" more often in non-KA classes than in KA classes, possibly because teachers without aides tended to demand stricter discipline.

Teachers with aides were observed spending less time disciplining children than teachers without aides. While the average non-KA teacher had to halt class instruction to handle disruptive children personally, the evaluation team observed aides dealing with such children while the KA teachers continued uninterruptedly with class instruction.

Overall, there was no significant difference between project and nonproject teachers in the extent of their circulating as resource persons or working with individual children. However, the presence of the aide more than doubled the availability of such services in the average project classroom.

SUMMARY AND CONCLUSIONS

The Kindergarten Aides project was developed to increase the adult/child ratio, giving teachers greater opportunities to individualize instruction and develop better rapport with their pupils.

The project's intended mode of operation was fully implemented. Aide assignment ranged from one aide working full time with one teacher, to one aide working part-time with four teachers. The average aide worked with two teachers. Most teachers reported that they received at least three hours of service daily, in the morning or afternoon. Teachers favorably rated aides' contributions to the overall education of pupils, and their own working relationships with the aides.

Attendance patterns of aides were found to be less than satisfactory. From September to May 1, almost one fourth of the aides were absent more than 15 days.

Six staff-development sessions were provided to increase aides' effectiveness in working with small groups and individual children. In March, one third of the experienced aides were transferred to the Follow Through project and were replaced by new aides. The seven district kindergarten supervisors trained the replacements during periodic staff-development sessions.

The project's first subobjective was attained; project aides were assigned and used only in kindergarten. However, the second subobjective was partially attained. Aides spent less than the 65% minimum of their daily time supervising and/or tutoring individuals or small groups; aides did not exceed the specified maximum of 15% for clerical duties, but devoted more than the 20% limit to activities such as class trips, housekeeping tasks, supervising breakfast/lunch programs, and operating audiovisual equipment.

The greatest impact of the project was in small-group instruction. Observations and interviews with school staff showed that significantly more small- and large-group instruction took place in an aide's presence. Project teachers were observed lecturing, giving directions, assigning homogeneous tasks, performing housekeeping and clerical tasks, and disciplining significantly less than nonproject teachers.

Through utilization of aides, the project's overall objective of enabling the teacher to better implement an individualized and small-group instructional program was attained.

TABLE 1

CONDITIONS FOUND IN OBSERVED KINDERGARTEN CLASSES WITH AND WITHOUT KINDERGARTEN AIDES

Focus of Observation	Mean Percentage of Time		
	In 48 Classes with Aides		In 20 Classes without Aides
Group Size[1]			
Individual (1 or 2)	16.9%		20.0%
Small Group (3 to 7)	28.5		24.5
Large Group (7 or more)	6.9*		3.0
Whole Class	62.9		71.5*
Differentiation of Materials			
Low, almost every pupil working on same assignment	61.4		68.7*
Differentiated pacing, at least 4 pupils working on different pages of same book	0.2		0.5
Differentiated materials, at least 4 pupils working of different materials	38.4		30.7
Teacher/Aide Behavior[1]	Aide	Tchr.	Teacher
Lecturing, directing whole class	5.9	44.8	61.0***
Working with small group	25.0	21.0**	9.5
Circulating as resource person	19.3	15.9	20.5
Working with individual children	16.4	15.9	9.5
Performing housekeeping chores	23.9	7.5	19.5****
Performing clerical tasks	15.0	5.0	14.5****
Disciplining one or more children	8.8	19.6	37.5****

TABLE 1 (Continued)

CONDITIONS FOUND IN OBSERVED KINDERGARTEN CLASSES WITH AND WITHOUT KINDERGARTEN AIDES

Focus of Observation	Mean Percentage of Time	
	In 48 Classes with Aides	In 20 Classe without Aide
Pupil Cooperation, Rapport with Teacher		
Excellent	14.7	23.8**
Adequate	77.7*	71.4
Inadequate	7.6	4.8
Pupil Interest, Involvement, Attentiveness		
Excellent	16.5	23.7**
Adequate	76.3	70.7
Inadequate	7.2	5.6

[1] Sum of percentages exceeds 100 if various conditions were observed concurrently.

*Significantly greater (p<.25) than corresponding percentage in adjacent column.

**Difference significant at the .10 level.

***Difference significant at the .05 level.

****Difference significant at the .01 level.

TABLE 2

ACTIVITIES OF PUPILS (OBSERVED IN RANDOM GROUPS OF SIX) IN KINDERGARTEN CLASSES WITH AND WITHOUT AIDES

Focus of Observation	Mean Number of Pupils	
	In 48 Classes with Aides	In 20 Classes without Aides
Instructional Activities		
Paper-pencil activity	1.8	1.7
Attending to group activity (listening, watching)	2.2	2.0
Teacher-pupil interaction (teacher-initiated)	1.1	1.1
Pupil-teacher interaction (pupil-initiated)	0.4	0.4
Pupil-pupil interaction (academic)	0.9	1.4****
Aide-pupil interaction (aide/teacher-initiated)	0.6	-
Pupil-aide interaction (pupil-initiated)	0.2	-
Noninstructional Activities		
Pupil-pupil interaction (non-academic)	0.6	0.7
Unstructured activity (waiting, getting materials)	0.8	1.1
Deviating from class instruction	0.5	0.7

****Significantly greater ($p < .01$) than corresponding number in adjacent column.

LANGUAGE ARTS READING CAMPS
(A Component of the COMPREHENSIVE READING PROJECT)

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

Language Arts Reading Camps (LARC) is an innovative language, reading, and communications-skills summer project designed to improve and supplement disadvantaged pupils' competencies in language arts. The camps, operated by settlement houses and housing developments, receive their language-arts components from the School District. In informal settings at scattered playground sites, LARC provides stimulating experiences to motivate active participation in oral expression, creative writing, and leisure reading.

RATIONALE

LARC participants live in inner-city housing projects, and are economically and educationally disadvantaged. These pupils' reading and language-arts skills are deficient, and their regular school language-arts programs can only partially remediate these deficiencies.

Target-area pupils need increased facility with language in all areas of communication. Some are bilingual, and some are less communicative than their peers because they lack versatile language experiences at home. Basically, the pupils need to talk and listen to someone. Pupils in Grades 7-12 especially need an increased facility with language, to achieve the more complex and sophisticated communication necessary for adult educational and vocational activities.

In order to learn to use language with confidence and enjoyment, LARC pupils need encouragement and reinforcement. Pupils also need to maintain language skills acquired during the previous school year, which can be partially lost during the summer months.

EXPECTED OUTCOMES

LARC attempts to improve and supplement target-area children's language-arts skills including oral expression, creative writing, and leisure reading. The informal day-camp setting provides the motivation to increase language abilities for pupils, parents, and teenage youth counselors.

MODE OF OPERATION

During six weeks in July and August, three hours of language-arts activities are provided each morning. The afternoon hours are spent on group and/or individual language-arts-related recreational activities.

LARC teachers assigned to each site supervise and maintain the language-arts program. Teachers spend an average of 15 hours a week working directly with the children, assisting camp counselors, and holding daily and weekly meetings with their staff. At these meetings, teachers and staff discuss the characteristics and needs of the children and the use of language-arts activities and materials.

Most camps encourage the production of newspapers. The children prepare and produce camp newspapers with assistance from the staff. Cameras and tape recorders are used to develop oral and written communication skills. Other LARC activities included writing self-portrait stories and playing LARC bingo, bean-bag games designed to teach vowels and consonants, ring-toss games to teach prefixes and suffixes, and post office games for developing written communication skills. LARC teachers use their creative, innovative ideas in developing activities to motivate children to improve their language-arts skills. Parents, youth counselors and community leaders use some of these ideas in their homes and in the community. Temple University Veterans in Public Service (VIPS) are taught techniques and ideas to use in language-arts instruction.

PREVIOUS FINDINGS

In each year of the project, teachers planned, developed, and executed formal and informal language-arts activities for the children. They reported that the pupils showed increased interest in reading books and using the library, improvement in pronunciation, word-attack, and written composition skills, and a tendency to do additional work at home. Evaluators observed LARC children actively participating in group discussions.

In 1974, parents and counselors were trained to provide individual language-arts instruction to the children. A picture-stimulus test revealed that the communication skills of participating pupils increased during the six weeks of the project.

THE 1974-1975 EVALUATION

To assess the attainment of the project's stated objectives, the current-year evaluation included on-site observations, LARC teacher surveys and questionnaires, interviews with LARC teachers, and conferences with the project director.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. The LARC staff consisted of two full-time and 17 on-site language-arts teachers, 44 parent and community volunteers, 206 Youth Corps counselors, and 26 Veterans in Public Service (VIPS) from Temple University. The staff aided in tutoring, supervision, and planning. The project serviced more than 1,100 primary-grade children.

Fifty-six systematic observations, averaging 45 minutes each, were made during a five-week period. Data were collected with a 12-category observational checklist, developed by the evaluators for use in observing informal activity-centered learning approaches.

In 52 observations, the physical atmosphere of LARC was judged comfortable and stimulating. The quality and quantity of materials available to children were exceptionally high. Camp emotional atmosphere was considered positive during 49 observations, as evidenced by the teachers', counselors', and children's happy and satisfied physical appearance.

In all observations, LARC teachers prescribed a specific task (or number of tasks) for all pupils to accomplish. The main LARC teaching approach was gamelike, rather than lecture, discussion, or drill, and in all observations LARC teachers organized structured games with a clear, cognitive focus. Language-arts games, either commercial or teacher-made, encouraged pupils to retrieve and synthesize their existing knowledge.

Pupil self-concepts were considered positive. In 50 observations, most pupils exhibited high self-concepts, appearing physically happy and active. They mostly made positive statements about their own personalities, looks, and physical and intellectual abilities. They also verbally and nonverbally accepted the feelings and thoughts of other pupils and interacted with them in a positive, self-confident way. Pupils often complimented, agreed with, or added to each other's work, ideas, and opinions.

Pupil self-discipline was also considered very high. In 52 observations, most pupils were sufficiently self-disciplined to work cooperatively with their peers. Verbal and nonverbal teacher threats and punishments were infrequent. Most pupils appeared to perceive the teacher as a resource person instead of a disciplinarian. Pupils seemed to follow internalized rules and regulations rather than rules established by the LARC staff.

The evaluators conducted interviews with all LARC teachers, in addition to making on-site observations. The teachers indicated that although the project in general was successfully implemented, some areas of the project should be improved. Suggested improvements are summarized in the following paragraphs.

The absence of Temple University interns was evident this year, and teachers felt that small-group and individualized instruction was reduced. Attempts to regain intern service were suggested.

In some camps, tape recorders and cameras were not available to pupils for use in the development of their oral and written communication skills. It was suggested that each camp be provided with a camera, a tape recorder, and funds for film developing.

Some LARC teachers referred to problems with camp-newspaper production. Although most duplication difficulties were solved, paper was not distributed in sufficient amounts.

A two-day staff-development workshop was held prior to the camps' opening. LARC teachers felt that this year's on-site orientation was more beneficial than previous sessions at Temple University.

LARC teachers suggested that busses for field trips be made available at earlier dates. Advanced scheduling would be possible, and trips could be culminating activities for instructional units.

LARC teachers found it difficult to coordinate daily language-arts activities without meeting every day with counselors for planning the activities. Preparation time could be allotted for LARC teachers and staff to organize the activities of each day.

LARC teachers said they would like to know before the end of the school year whether they would be employed by LARC during the summer. Then the teachers could plan in advance, and use some language-arts materials from their own schools. Final selection of LARC teachers and sites prior to the end of the school year would facilitate this planning.

Some teachers recommended that the camp director be encouraged to assess the performance of the counselors on a regular basis. This, in addition to better-defined selection procedures, could lead to more effective counselor service.

All of the 17 LARC teachers agreed that the services of the two full-time teachers were necessary and effective. The full-time teachers were responsible for providing vital instructional services, monitoring, and supporting and coordinating LARC activities for each camp.

ATTAINMENT OF OBJECTIVES

Objective 1: To provide children with verbal functioning experiences through a variety of speaking and listening activities, as measured by observational checklists and by a teacher questionnaire.

This objective was attained.

Questionnaire responses by 17 teachers indicated that 26 different verbal functioning exercises were used. The most frequently employed were creative dramatics, listening to stories, using tape recorders, playing LARC games, and writing and reading individual experience stories. Fifty-six observations made by the evaluators verified the use of 20 of the 26 verbal functioning experiences reported by the teachers.

Objective 2: To increase the quantity of children's writing through production of camp newspapers and other creative writings, as measured by performance checklists, a teacher questionnaire, and word counts of written materials submitted.

This objective was attained.

A project-specific checklist revealed that 2,512 newspaper articles were submitted by pupil participants. The average number of newspaper articles per pupil at each camp is shown in Table 1. Overall, the average pupil wrote 2.4 articles during the LARC session. This was considered significant since target-area children generally do not write at all during the summer.

Fifteen (88%) of the 17 LARC teachers who completed a performance checklist felt that pupils improved in written composition, phrases, and sentences. Eleven teachers (65%) reported improvement in written paragraphs.

An evaluator-developed picture-stimulus test was administered at the beginning and end of the project to 78 children selected across grade levels. The test measured writing abilities, using as an index the number of words and sentences in children's writing samples.

Of the 78 children, 54 (69%) used a greater number of words in the posttest story than on the pretest. The difference between pretest and posttest means was 4.4 words, shown in Table 2. This difference was not statistically significant ($\underline{t} = 1.46$, df = 77, $p > .05$).

Of the 78 children, 40 (51%) wrote more sentences in the posttest story than on the pretest. On average, posttest stories were 1.3 sentences longer than the pretest. This difference was statistically significant ($\underline{t} = 2.61$, df = 77, $p < .05$).

Objective 3: To encourage within children a greater appreciation of literature, as measured by checklists of books read.

This objective was attained.

According to the project-specific checklist, participants read 4,385 books during the six-week camp session. The average number of books read per pupil at each camp is shown in Table 1. Overall, the average pupil read an average of 4.1 books during the summer. Attainment of this objective was considered significant, because disadvantaged pupils had access to books in an atmosphere conducive to reading, not usually available to them in the summer.

Objective 4: To assist Youth Corps representatives in providing constructive help in language-arts activities to younger children individually and in groups, as measured by observational checklists and a teacher questionnaire.

This objective was attained.

Teacher-questionnaire responses and evaluator observations showed that Youth Corps counselors engaged in tutoring, instructing, and supervising small groups and/or individuals. The LARC teachers supervised the counselors in their activities. Counselors also participated in staff-development activities.

SUMMARY AND CONCLUSIONS

The LARC project, consisting of 17 summer day camps, involved children, youth counselors, parent and community volunteers, and Temple University Veterans in Public Service with language arts. LARC programs, located in target-area housing developments and projects, provided a variety of language-arts experiences throughout a six-week camp session.

The intended mode of operation was fully implemented. The project's specially-trained language-arts teachers used various activities and games to provide an informal approach to language. In many cases, LARC teachers used their own innovative ideas to motivate children to improve their language-arts skills.

LARC teachers helped increase the communication skills of pupils, in addition to training youth counselors in language-arts techniques and skills. LARC encouraged children to read paperback books, participate in the publication of weekly camp newspapers, and improve their verbal functioning.

The project attained its stated objectives. The LARC teachers provided the pupils with a variety of verbal functioning experiences. The average pupil submitted 2.4 newspaper articles over the six-week session. Most teachers reported an overall improvement in written composition, phrases, and sentences. Picture-stimulus pretests and posttests, administered to 78 children across all grade levels, showed that pupils used more words and sentences in writing samples at the end of their LARC experience. LARC participants read an average of 4.1 paperback books during the summer. Youth Corps counselors engaged in tutoring, instructing, and supervising small groups and individual pupils, and also participated in staff-development workshops.

The evaluators' on-site observations and interviews with teachers elicited these suggestions: (a) reinstatement of Temple University teaching-intern service, (b) provision of tape recorders, cameras, and money for film developing at each camp, (c) continuation of the two-day, on-site orientations conducted by the LARC teachers, (d) daily staff-development time for LARC teachers and staff, (e) two more-extensive staff-development workshops to be scheduled in advance at each camp by the full-time teachers, (f) selection of teachers and sites by June 1 to allow more extensive planning, (g) development of selection procedures for counselors and regular assessment of their performance by camp directors, and (h) retaining the services of the two full-time teachers to share in the coordination of the project's camps.

TABLE 1

DESCRIPTIVE DATA FOR LARC CAMPS

Camp	Enrollment	Number of Youth Corps Staff Members	Average Number of Newspaper Articles Submitted per Pupil	Average Number of Books Read per Pupil
Abbotsford	70	20	4.1	6.0
Germantown	90	19	1.3	15.3
Haddington	49	11	2.1	2.9
Harrison Plaza	28	9	3.3	2.6
Harrowgate	50	4	2.4	1.3
Haverford	39	9	1.5	9.3
Hawthorne	90	20	6.6	7.1
Houston	105	22	1.0	0.6
Mantua	35	11	2.3	1.9
Millcreek	32	10	0.4	7.0
Norris	110	14	0.6	3.6
North Central	50	6	1.7	2.0
North Light	84	12	2.9	1.4
Scatter Site	23	7	3.6	0.8
Spring Garden	65	15	2.1	0.6
Wharton Center-Strawberry Mansion	75	12	1.1	3.0
Wilson Park	68	5	3.5	2.4

TABLE 2

SCORES (WORD AND SENTENCE COUNTS) OF LARC PARTICIPANTS ON PICTURE-STIMULUS TEST

Variable	Pretest Mean	Posttest Mean	Gain
Total Words	31.5	35.9	4.4
Total Sentences	3.2	4.5	1.3*

*Statistically significant at the .05 level.

OPERATION INDIVIDUAL
(A Component of the COMPREHENSIVE READING PROJECT)

Operation Individual is designed to help underachieving ninth-grade students develop competence in basic academic skills and improve their attitudes toward school.

RATIONALE

The project operates on the assumption that the underachievement of target-area students is attributable to their deficiency in basic skills, inadequate study skills, and poor attitudes toward school. It is further assumed that, if competence can be achieved in basic skills, the students will tend to develop more positive attitudes toward school. The project is designed to provide (a) an environment which is adapted to the students' needs and (b) opportunities for success in an academic situation.

EXPECTED OUTCOMES

By participating in the project, students should develop competence in reading and study skills. As academic competence increases, their attitudes toward school should become more positive.

MODE OF OPERATION

Ninth-grade students are selected for project participation on the basis of their eighth-grade records, low scores on a high school placement test, low reading levels, inadequate study skills, and poor attitudes toward school.

These underachieving students are assigned to the project's block-rostered classes in social studies, science, English, and mathematics. In addition, they receive daily remedial reading instruction. Reading is emphasized in all subject areas. During each class session (with the exception of science), the students receive small-group instruction from the teacher and/or classroom aide.

PREVIOUS FINDINGS

In 1972-1973, the Iowa Tests of Educational Development (ITED) were administered in October and in May. The average participating student advanced from the national 14th percentile to the national 16th percentile. However, because the project was not operational until March 1973, the test results may have been attributable to conditions existing prior to the project's inception.

During 1973-1974, nearly half the students demonstrated a seven-month gain (in seven months) in their Total Reading and Reference Skills GE scores on the Comprehensive Tests of Basic Skills. On the programmed materials provided by the project, in two of the four subject areas (social studies and science), approximately three-fourths of the students advanced one grade level in one academic year. There were no changes in students' self-concepts or school-related attitudes as measured by a semantic differential survey.

THE 1974-1975 EVALUATION

The current year's evaluation of Operation Individual focused on (a) participants' gains in reading and reference skills measured by out-of-level standardized tests, (b) their improvement in specified skills in each of the subject areas, and (c) their attitudes toward school.

IMPLEMENTATION

The project's intended mode of operation was fully implemented in October at one school, and partially implemented at the second school. At both schools, students were block rostered and received extra reading instruction.

Each project class, except science in one school, had the services of an aide. The six aides provided tutorial help to students. Observations by the evaluation team revealed that aides were utilized differently at the two schools. At one school, the teacher instructed the entire class, and aides provided individual or small-group assistance as needed. At the other, aides performed clerical duties, worked with half the students while the teacher instructed the others, and helped students with assignments in the Resource Center.

At the school where late implementation occurred, daily reading instruction was provided as intended. At the other school, however, scheduling problems caused unequal class sizes. Because of modular scheduling and the large number of participants, reading instruction was given for three days over a six-day cycle, rather than daily. In addition, due to the reading specialist's absence, formal instruction was lacking for approximately half the school year. However, 47 of the 148 students were instructed by a nonproject reading specialist.

Although implementation difficulties did occur, classroom observations indicated that the project attempted to use available resources and materials to provide students with skills needed for success in a high school curriculum.

ATTAINMENT OF OBJECTIVES

Objective 1: To increase the achievement level of project students to the extent that two thirds of the students demonstrate one year's gain in GE scores within *one academic year on the Reading and Reference Skills sections of the Comprehensive Tests of Basic Skills.*

This objective was partially attained. The criterion was considered met for reference skills but not for reading.

The Total Reading and Reference Skills sections of the Comprehensive Tests of Basic Skills (Form S, Level 3) were administered out-of-level to 175 ninth-grade students in October 1974 and April 1975. Since the time between pretest and posttest administrations was 0.6 year, the criterion was adjusted so that a grade-equivalent gain of 0.6 (six months) was expected rather than a full year's gain.

In reading the pretest GE scores ranged from 2.1 to 11.2, with a mean of 7.2; the posttest scores ranged from 3.3 to 12.3, with a mean of 7.7. Gains by individual students are summarized in Table 1. Eighty of the 175 students (45%, not the expected two thirds) showed gains of at least 0.6 in Total Reading GE score.

In reference skills, pretest GE scores ranged from 2.9 to 12.7, with a mean of 7.0; the posttest scores ranged from 2.9 to 12.9, with a mean of 8.1. Gains by individual students are summarized in Table 2. Of the 175 students, 111 (63%) gained at least 0.6 in GE score. Since this percentage fell within the 60%-74% confidence interval adopted for the two-thirds criterion, the reference-skills part of the objective was considered virtually attained.

Objective 2: To increase the achievement level of project students to the extent that 85% of them will improve their ratings in three of four subjects on project-specific skills lists between the beginning and the end of the school year.

This objective was partially attained. The criterion was considered met for content-related skills but not for responsibility skills. Skill records were developed to provide classroom-achievement information supplementing report-card grades. Skill records in four subject areas--English, science, mathematics, social studies--were examined to determine each student's content mastery and learning responsibility.

Content skills were those which teachers felt were necessary for mastery of the subject matter. Each student was rated on several skills for every subject area. The rating scale noted whether the student had "gained significant additional knowledge," "gained some additional knowledge," or made "no progress," or the teacher had "no opportunity to observe."

Responsibility skills were those which indicated accountability for the student's own learning. Students' responsibility skills in several areas within each subject were rated by the teacher as "excellent", "good", "adequate", "unsatisfactory", "no effort", or "not applicable".

The progress of 191 ninth-grade students was rated in January, March, and May. For a subgroup of the January ratings, interrater reliability coefficients for three responsibility skills were computed for each of the three groups of teachers who did the rating. The nine reliability coefficients ranged from +.33 to +.84.

A student's content skills were considered increased if for any of the three marking periods he received at least the "gained some additional knowledge" rating for all skills in three of the four subjects. This criterion was met by the 158 (83%) of the 191 students. Because this percentage fell within the 80%-90% confidence interval adopted for the 85% criterion, the content-skills part of the objective was considered virtually attained.

A student's responsibility skills were considered adequate if for any of the three marking periods he received at least the "good" rating for all skills in three of the four subjects. Only 50 of the 191 students (26%, not the expected 85%) met the responsibility-skills criterion.

Objective 3: To develop more positive school-related attitudes on the part of the project students, as measured by the School Sentiment Index--Secondary Level.

This objective was not attained.

The School Sentiment Index--Secondary Level (SSI), consisting of 83 items related to five aspects of school, was used to ascertain students' school-related attitudes. To each item, students responded on a 1 (strongly agree) to 4 (strongly disagree) scale. Total scores, after conversion to a 4, 3, 2, 1 scale of favorable response, could range from 83 to 332. Test-retest reliability on the SSI was determined through the retesting of 105 project and nonproject students two weeks after the first administration. The reliability coefficient was +.82.

The SSI was administered in October 1974 and again in April 1975 to 79 project students and 79 nonproject students; equal numbers of students in both categories, project and nonproject, took the SSI only in April (Solomon four-group design). In both schools, the nonproject students were in the track above the project students, because all students in the lowest track were project participants. Results of administrations of the SSI are summarized in Table 3.

An analysis of variance performed on the April scores showed no significant difference (F=.001, df=1/312, p>.05) between the mean scores of project and nonproject students. However, the October pretesting appeared to have a significant effect on April posttest scores (F=3.91, df=1/312, p<.05), but not differentially on project and nonproject students (F=.72, df= 1/312, p>.05). Therefore, the objective was not attained.

SUMMARY AND CONCLUSIONS

Operation Individual provided instruction and tutorial aid designed to develop skills necessary for success in a high school curriculum. The project's intended mode of operation was fully implemented at one school, and partially at the second.

The project did not attain its objective of improving reading skills. However, it did improve students' ability to use reference materials, indicated by a gain of 0.6 GE or more on the Reference Skills section of the Comprehensive Tests of Basic Skills. On skill records, teacher ratings of students' classroom achievement indicated that English, science, mathematics, and social studies skills were developed, although the students tended not to assume responsibility for their own learning.

Comparison of project and nonproject students' scores on the School Sentiment Index indicated no significant difference between the school-related attitudes of the two groups.

TABLE 1

GAINS IN CTBS TOTAL READING SCORE
FROM OCTOBER UNTIL APRIL (0.6 YEAR)
BY OPERATION-INDIVIDUAL STUDENTS

GE Score Gain	No. of Students	Percentage
2.1 or more	11	6%
1.6 - 2.0	13	7
1.1 - 1.5	20	11
0.6 - 1.0	36	21
Less than 0.6	95	55
Total	175	100%

TABLE 2

GAINS IN CTBS REFERENCE-SKILLS SCORE FROM OCTOBER UNTIL APRIL (0.6 YEAR) BY OPERATION-INDIVIDUAL STUDENTS

GE Score Gain	No. of Students	Percentage
2.1 or more	52	30%
1.6 - 2.0	23	13
1.1 - 1.5	13	7
0.6 - 1.0	23	13
Less than 0.6	64	37
Total	175	100%

TABLE 3

MEAN SCORES OF OPERATION-INDIVIDUAL AND COMPARISON STUDENTS ON SCHOOL SENTIMENT INDEX

Group	N	October Pretest	April Posttest	Change
Pretested Participating	79	226	223	- 3
Pretested Comparison	79	226	221	- 5
Unpretested Participating	79	--	215	--
Unpretested Comparison	79	--	217	--

PARENT SCHOOL AIDES
(A Component of the COMPREHENSIVE READING PROJECT)

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

The Parent School Aides project introduces large numbers of paraprofessional aides into schools to give teachers assistance in overcrowded inner-city classrooms. Teachers are enabled to spend more time attending to the individual needs of their pupils.

RATIONALE

The introduction of large numbers of trained parent aides into urban classrooms represents a major structural change in American education. The project has profound implications for classroom organization, for pupil learning, for school-community relations, and for the changing role of the teaching profession. With respect to classroom organization, the addition of another adult can allow greater flexibility in grouping procedures and in differentiation of levels of instruction. The expected increase in individualized instruction can improve pupil achievement. The need for increased communication between the community and the school can be satisfied through the direct involvement of parents from the community in the educational program. Parent assistance has had positive effects on both career and role satisfaction of the classroom teacher.

EXPECTED OUTCOMES

By increasing the amount of individualized instruction, the teacher can alleviate the pupils' diagnosed reading and mathematics weaknesses.

MODE OF OPERATION

Initially the parents are trained extensively in the use of individualized instructional materials for reading and mathematics. Later they are assigned to classroom teachers who direct them in working with small groups or individual pupils in skill areas diagnosed as weak.

For reading instruction, the parent aides monitor and direct reading games, supervise the completion of assigned activities, score worksheets, act as models in the reading of stories, help in language-arts drills, and assist in the development of appropriate manipulatives.

For mathematics instruction, the parent aides work with the Individually Prescribed Instruction (IPI) mathematics program under the auspices of Research for Better Schools, Incorporated. Their duties include marking, scoring, graphing, and summarizing pupil progress. In non-IPI mathematics classes, the aides supervise small groups and individual pupils, score papers, and prepare manipulatives and worksheets.

PREVIOUS FINDINGS

Evaluations from 1968 until the current school year have consisted primarily of systematic classroom observations, and questionnaires, rating scales, and interviews administered to teachers, principals, and/or the aides. Each year, the results were generally positive. In 1968-1969, pupil progress was demonstrated in reading and language arts as a result of aide assistance, and the project was perceived as influencing parent interest in school problems. In 1970-1971, principals' ratings of aides revealed that aides were performing their tasks well and were of great benefit to the instructional program. In 1971-1972, survey responses by principals revealed that aides were performing those tasks which were expected to extend the instructional services of the classroom teachers. In 1972-1973, formal interviews with classroom teachers and their parent aides indicated that paraprofessional assistance was valuable in individualizing instruction. Time sheets completed by the aides supported their interview responses concerning the amount of their time devoted to individual and/or small-group instructional assistance.

In 1973-1974, a series of observations of classes in randomly selected schools receiving parent aide service revealed that objectives concerning grouping structures and levels of instructional differentiation were attained. However, teachers reported no significant difference between the major classroom problems in their first year with an aide and the problems in their previous year of teaching without an aide.

THE 1974-1975 EVALUATION

The current year's evaluation of the Parent School Aides project included (a) a preliminary analysis of available standardized test results from classes receiving aide service, (b) a survey of principals', teachers', and aides' perceptions and attitudes regarding the project, and (c) an assessment of the effectiveness and usefulness of the in-service program experienced by the aides.

IMPLEMENTATION

The project's intended mode of operation was partially implemented. The number of aides stipulated in the current budget and proposal was greater than the number of aides actually employed. Of 253 positions, 220 were filled by experienced Parent School Aides. The 33 vacancies were not immediately filled because of contract and budgetary considerations. Schools with less than 50% of the originally assigned aides returning in September could acquire additional aides to maintain the service level, and four new persons were hired for this purpose. Twelve aides voluntarily terminated their employment during the year. Therefore, a total of 212 aides were providing service at the completion of the current school year.

Because no new aides were hired, the staff-development program was modified. The intensive training program planned for September was canceled. The three project coordinators planned monthly half-day sessions--26 in all--to accommodate all returning aides. Information about these sessions is summarized in Table 1. Attending seven sessions, the evaluator generally observed that (a) programs were well planned and efficiently conducted, (b) most sessions provided "hands-on" experiences, (c) demonstrations and presentations were effective, and (d) participation and enthusiasm were high.

Informal reports from project coordinators and observations of parent aide classrooms revealed that aides were performing their expected tasks, enabling teachers to implement individualized and small-group instruction.

ATTAINMENT OF OBJECTIVES

Objective 1: To maintain and/or improve the national percentile ranks of the project's pupils in reading, as evidenced by annual scores on the Educational Development Series of the Scholastic Testing Service.

This objective was partially attained. Project pupils in Grade 2 improved their national percentile rank; pupils in Grade 3 did not.

The Educational Development Series of the Scholastic Testing Service (STS), a standardized achievement series, is administered to all parochial schools in November of each school year. Because Parent School Aide services are concentrated in the primary grades, test results for pupils served in Grades 2 and 3 were reviewed.

STS grade-equivalent (GE) scores were provided by the Archdiocese. A GE gain of 1.0 is indicative of maintaining national percentile rank. Scores on the Composite Basic Skills sections were compared for the November 1973 and November 1974 testing periods.

In November 1974, Grade 3 pupils attained a mean GE score of 3.0, reflecting a gain of 1.2 points since November of Grade 2, and Grade 4 pupils attained a mean GE score of 3.7, reflecting a gain of 0.9 points since November of Grade 3.

Objective 2: To maintain previous years' levels of satisfaction of teachers, principals, and aides with the services provided by the parent aides to the eligible schools, as indicated through formal interviews and/or questionnaires.

This objective was attained.

Some interruption in parent aide service was experienced during the current school year because of budgetary considerations. Because of the loss in service, it was expected that the high degree of satisfaction expressed during previous evaluations by principals, teachers, and aides might have changed.

To assess satisfaction levels, three questionnaires were developed incorporating many questions from previous evaluations. Each questionnaire consisted primarily of open-ended questions. A total of 42 principals, 230 teachers, and 181 parent aides respectively responded to the Parent Aide Project Principal, Teacher, and Aide Questionnaires.

Of the 42 principals, 40 responded that the project was effective in their schools. They stated that the primary advantages to teachers' instructional programs included reinforcement of teaching and contribution to individualized programs. They believed that pupils should receive 30 minutes of aide service daily for as long as eight school years.

Of the 230 teachers responding, 224 were satisfied with services provided by their parent aides. Respondents expressed interest in an in-service program for teachers and aides, and desired more joint planning and sharing of ideas. Teachers believed if they lost aide service, they would be unable to individualize instructional programs.

Of the 181 parent aides, 179 gave positive ratings to their total experience with the project. All aides except one rated their working relationships with teachers as positive. They believed that without aides, teachers' individualized attention, especially to slower pupils, would be negatively affected. Aides recommended promoting closer relationships with teachers through joint in-service sessions, joint faculty meetings, and periodic joint planning sessions.

These findings indicate that teachers, principals, and aides continued to express satisfaction with parent aides' service.

Objective 3: To provide effective formal training sessions for all parent aides, as indicated by rating scales, interviews, questionnaires, and/or appropriate case-study assessment procedures completed by the parent aides upon conclusion of their training experiences.

This objective was attained.

The Parent Aide Project In-Service Questionnaire was developed to assess the in-service programs organized and conducted by the three project coordinators. The questionnaire, consisting primarily of open-ended questions, was mailed to all parent aides during April.

Of the 176 aides responding to the questionnaire, 153 rated their in-service experiences as valuable. Upon request, most aides provided a list of the three most useful ideas, activities, or techniques presented during the in-service program which they used or intended to use in 1974-1975. The most frequently mentioned items were use of the Multimedia Center and demonstrations of games, instructional materials, and multimedia equipment. Aides reported freedom to try many of the techniques.

Only 34 aides did not specify benefits resulting from their participation in the in-service program. Only 36 aides specified in-service activities, ideas, or techniques which they felt were not useful. Topics suggested for future workshops included techniques related to specific content areas, and motivation or behavior modification.

SUMMARY AND CONCLUSIONS

The Parent School Aides project was created to assist teachers in increasing individualized instruction for pupils with diagnosed reading and mathematics weaknesses.

The current year's evaluation utilized standardized test results and teacher, principal, and aide questionnaires. The project's intended mode of operation was partially implemented; a number of vacancies remained unfilled because of extended contract negotiations and budgetary problems.

All project objectives were fully or partially attained. Pupils in Grade 2 parent aide classes maintained their national percentile rank on the Composite Basic Skills section of the Scholastic Testing Service Educational Development Series. Pupils in Grade 3, although gaining 0.9 in grade-equivalent score, did not maintain their rank. Principals, teachers, and aides continued to express satisfaction with services provided by parent aides, even though service had been reduced in some schools. Moreover, the aides reported that the intensive in-service training provided them with useful ideas, techniques, and classroom activities. Additional information from the project coordinators and the evaluator's observations indicated that aides were enabling teachers to individualize instructional programs.

Target-school personnel have described the Parent School Aides project as one of the most valuable projects in their respective schools, in that it provides meaningful service to the classroom teacher, the school, and the community.

TABLE 1

SUMMARY OF IN-SERVICE TRAINING FOR PARENT SCHOOL AIDES

Clientele	No. of Sessions	Month Given	Purpose or Description
61 aides from North Philadelphia group	1	September	Presentation on developmental theories of Freud, Erikson, Piaget, and Kohlberg in terms of structure, organization, and process. Basic assumptions about the course of normal development in childhood. Questions and evidence.
70 aides from South Philadelphia group	1	September	Presentation on the disadvantaged child, to develop aides' awareness of the variety of learning disadvantages: mental, emotional, economic, social.
60 aides from North Philadelphia group	1	September	Presentation of reading techniques, math games and drills to be used as motivation devices in learning.
85 aides from West Philadelphia group	1	September	General review of guidelines and distribution of materials.
58 aides from West Philadelphia group	1	October	Individual presentations by guest speakers: Children's Literature, Classroom Management, Child Psychology, Reading Comprehension.
60 aides from West Philadelphia group	1	October	Individual seminars including phonics, reading games, math activities, interpersonal relations.
30 aides from West Philadelphia group	1	October	Sullivan Programmed Series, media demonstrations, activity period.

TABLE 1 (Continued)

SUMMARY OF IN-SERVICE TRAINING FOR PARENT SCHOOL AIDES

Clientele	No. of Sessions	Month Given	Purpose or Description
53 aides from North Philadelphia group	1	October	Address by school psychologist: Understanding and Helping the Slow Learner.
61 aides from South Philadelphia group	1	October	The Language Experience Approach to the Teaching of Reading.
49 aides from North Philadelphia group	1	December	To acquaint the aides with the various manipulative learning devices supplied to the schools through Title I funding. The materials presented and demonstrated by aides included Phonics We Use, First Experiences with Vowels and Consonants, Second Experiences with Vowels and Consonants, Math Matrix, First Talking Alphabet, Creative Reading Program, Eye-Gate Functional Phonics.
7 aides from St. Charles School	1	December	Reviewed formation of cursive letters; demonstration of penmanship lesson--the letter M; demonstrated means of teaching listening skills.
7 aides from St. Charles School	1	December	Reviewed elementary math skills.
7 aides from St. Charles School	1	December	Teach aides best method to use Reading Word Book pages and Phonics Workbook; how to conduct oral reading lesson.

TABLE 1 (Continued)

SUMMARY OF IN-SERVICE TRAINING FOR PARENT SCHOOL AIDES

Clientele	No. of Sessions	Month Given	Purpose or Description
50 aides from South Philadelphia group	1	December	Demonstrate math drill techniques. Encourage use of directed activities in the Sullivan guidebook. Stimulate more creative approach in reinforcement methods.
14 aides from North Philadelphia group	1	February	Aides from St. Anne School and Visitation School observed the use of the Distar Program in this School. Presented lessons in reading, math, and language.
8 aides from South Philadelphia group	2	February	Four aides from St. Charles went to St. Anthony School on each day for observation of the St. Anthony aides. They observed a classroom with an aide helping with IPI, an aide taking a small group for Sullivan reading, an aide supervising a group doing SRA reading, an aide conducting an EPC program. The session concluded with a period for discussion, comments, and questions.
61 aides from West Philadelphia group	1	February	Presentation on Behavioral Objectives; experience in listening techniques for communication; spelling techniques and reminders.
3 aides from South Philadelphia group	1	February	Demonstration of flash cards; discussion of behavior problems and methods of reading reinforcement.

TABLE 1 (Continued)

SUMMARY OF IN-SERVICE TRAINING FOR PARENT SCHOOL AIDES

Clientele	No. of Sessions	Month Given	Purpose or Description
59 aides from South Philadelphia group	1	March	Presentation, Speech and Language as Communication Skills; "trigger word" games were presented as a method of encouraging reluctant talkers to communicate; techniques for reinforcing spelling were demonstrated.
All aides from West Philadelphia group	1 each	April	The aides from each school visited the Multimedia Center and received general information, including a review of the inventory. A lesson on spelling and comprehension skills and a demonstration of materials for spelling available in the Multimedia Center were provided.
57 aides from North Philadelphia group	1 each	April	Sessions were held daily from April 21 to April 29. The aides reported to the Multimedia Center. Each aide received an envelope containing catalog numbers and was instructed to locate these items, examine the materials, and list them for future reference. Purpose was to acquaint the aides with materials for reading and mathematics and to teach them to use the catalog.
21 aides from South Philadelphia group	4	April/May	These four sessions were held to familiarize the aides with the Language Lotto kit which aims at language development.

PRIMARY READING SKILLS CENTERS
(A Component of the COMPREHENSIVE READING PROJECT)

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

The Primary Reading Skills Centers project provides remedial reading instruction to primary-grade children with deficiencies in reading skills.

RATIONALE

The participating pupils have failed to master basic reading skills and, therefore, are reading below grade level. The project is based upon the assumption that supplementary services can ameliorate low academic achievement resulting from reading difficulties. Services are provided to improve the comprehension and word-attack skills of the participating pupils.

EXPECTED OUTCOMES

It is expected that, through participation in the project, pupils will improve in reading-comprehension and word-attack skills.

MODE OF OPERATION

First-grade pupils who do not know the alphabet, and other pupils who are four or more instructional book levels below grade level (on the Informal Reading Inventory) are accepted into the project.

Equipment and instructional materials of many kinds are utilized for optimal development of specific skills. During the course of a lesson (50 minutes in length), the pupils engage in a variety of activities emphasizing individual skill development. The pupils work in small groups, with the reading teacher and an aide acting as resource persons. Each day, the reading teacher usually meets four instructional groups of approximately 12 to 18 pupils each.

Pupils leave the project when they are reading on grade level or when they are promoted to a grade above those served by the project.

PREVIOUS FINDINGS

Previous evaluations consistently indicated that project participants demonstrated gains in reading ability. Each year, at least 67% of the participating pupils met or exceeded the goal of gaining two instructional book levels per year, as measured by a group informal reading inventory, and there was a substantial increase from pretest to posttest in the percentage of pupils attaining mastery on the Botel Phonics Inventory.

THE 1974-1975 EVALUATION

This year's evaluation of the Primary Reading Skills Centers project focused on the degree to which participating pupils (a) improved in reading achievement, as measured by a group informal reading inventory, (b) developed their word-attack skills, as measured by the Botel Phonics Inventory or by an alphabet-recognition test, and (c) improved in reading skills measured by the 1970 California Achievement Tests' (CAT-70) Vocabulary and Reading Comprehension subtests.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. Both Primary Reading Skills Centers were monitored at the beginning and end of the school year. Classroom observations, teacher interviews, and responses to the Primary Reading Skills Center Questionnaire indicated that there was no substantial change in operation from previous years.

Both centers were equipped with a variety of commercial and teacher-made instructional materials and audiovisual equipment designed to develop specific reading skills. Each center was served by one paraprofessional aide.

Responses to the questionnaire indicated that pupils were selected for project participation on the bases of classroom-teacher recommendation, low IRI and Botel Phonics Inventory scores, and previous participation in the project. The areas in which most pupils had reading difficulties were word-attack skills, work habits, and sentence comprehension. Communication between project and classroom teachers included discussion of individual pupil problems, consultation when a pupil entered or left the project, and a written report to the classroom teacher.

The pupils, in groups of seven to 16, attended instructional periods of 30 to 45 minutes in a center classroom. At both centers, pupils in Grades 1-3 received daily instruction. Pupils in Grade 4 received instruction twice a week at one center, and once a week at the other. At one center, all kindergarten pupils received instruction twice weekly.

Observation revealed that the classroom organization for instruction differed greatly between the two centers. In one, the pupils spent a portion of the period in large-group instruction, after which the class was divided in half for small-group instruction. In the other center, pupils spent most of the period working with programmed materials, with both the teacher and the aide actively guiding individual pupils.

ATTAINMENT OF OBJECTIVES

Objective 1: To increase pupils' reading-achievement levels to the extent that 90% of the pupils gain one book level and 60% gain at least two book levels per academic year, as measured by pretest and posttest scores on a group informal reading inventory.

The objective was fully attained.

An informal reading inventory (IRI) was administered in September and May to pupils in Grades 2-4. The number of pupils in each grade achieving the specified gains between pretest and posttest is shown in Table 1. Ninety percent of the pupils gained at least one book level; 70% gained at least two levels.

Objective 2: To develop project pupils' word-attack skills to the extent that there is an increase of 20 points in the percentage of pupils attaining an 80% mastery score on the Botel Phonics Inventory, and 95% of the first-grade pupils achieve a mastery score of 95% on an alphabet-recognition test.

The objective was partially attained. The word-attack part was fully attained; the alphabet-recognition part was not.

In September and May, the Botel Phonics Inventory was administered to the pupils in Grades 2-4. Results are summarized in Table 2. From pretest to posttest, there was an increase of 46 points (more than the expected 20 points) in the percentage of pupils attaining mastery.

At the end of the school year, pupils in Grade 1 took a 52-item alphabet-recognition test. Nineteen pupils (73%, not the expected 95%) achieved at least a 95% mastery score.

Objective 3: To incre[illegible] project pupils' knowledge of vocabulary to the extent that there is, in one [illegible]mic year, a one-year gain in average GE score on the CAT-70 Vocabulary [illegible]est.

The objective was partially attained.

Pupils in Grades 2-4 at the St. Columba center were tested in January 1974 and 1975. Results are summarized in Table 3. All grades demonstrated gains in mean GE score over last year. Pupils in Grade 3 gained more than the specified amount, but pupils in Grades 2 and 4 gained less. Pupils at the St. Stephen center were not tested with the CAT-70 this year.

Objective 4: To increase project pupils' reading-comprehension skills to the extent that there is, in one academic year, a one-year gain in average GE score on the CAT-70 Reading Comprehension subtest.

The objective was partially attained.

Pupils in Grades 2-4 at St. Columba were tested in January 1974 and 1975. Results are summarized in Table 4. All grades demonstrated gains in mean GE score over last year, but only Grades 2 and 3 met the one-year criterion. Pupils at the St. Stephen center were not tested with the CAT-70 this year.

SUMMARY AND CONCLUSIONS

The Primary Reading Skills Centers project's intended mode of operation was fully implemented. All project objectives were fully or partially attained.

The instructional reading levels of 70% of the project pupils increased at least two book levels in one year's time. Specified gains in phonics mastery were exceeded by a considerable margin. Although some specific criteria were not met, pupils participating in the project demonstrated gains in alphabet recognition, vocabulary, and reading comprehension.

TABLE 1

GAINS ON IRI BETWEEN SEPTEMBER AND MAY BY PUPILS AT PRIMARY READING SKILLS CENTERS

Grade	No. of Pupils	Pupils Making No Gain		Pupils Gaining One Level		Pupils Gaining Two or More Levels	
		N	%	N	%	N	%
2	31	3	10	6	19	22	71
3	15	3	20	1	7	11	73
4	14	0	0	5	36	9	64
All	60	6	10%	12	20%	42	70%

TABLE 2

PERCENTAGE OF PRIMARY-READING-SKILLS-CENTERS PUPILS ACHIEVING MASTERY ON BOTEL PHONICS INVENTORY

Grade	No. of Pupils	September Pretest	May Posttest	Increase in Percentage
2	31	3%	58%	55
3	15	0	40	40
4	14	21	57	36
All	60	7%	53%	46

TABLE 3

CAT-70 VOCABULARY SCORES OF PUPILS AT A PRIMARY READING SKILLS CENTER

Grade	No. of Pupils	January 1974 Mean GE Score	January 1975 Mean GE Score	Mean GE Gain
2	4	1.4	1.6	0.2
3	8	1.7	3.0	1.3
4	11	3.4	3.7	0.3

TABLE 4

CAT-70 READING-COMPREHENSION SCORES OF PUPILS AT A PRIMARY READING SKILLS CENTER

Grade	No. of Pupils	January 1974 Mean GE Score	January 1975 Mean GE Score	Mean GE Gain
2	7	1.4	2.4	1.0
3	8	2.4	3.4	1.0
4	11	3.5	3.9	0.4

READING ENRICHMENT AND DEVELOPMENT
(A Component of the COMPREHENSIVE READING PROJECT)

The Reading Enrichment and Development project provides remedial reading services to underachieving ninth- and tenth-grade students.

RATIONALE

On standardized tests of basic skills, target-area students tend to score below national norms, particularly in reading. They also have difficulty in coping with the demands of high school curricula and tend to develop patterns of chronic underachievement. This project was established to provide these students with additional aid at the beginning of their high school education to improve their chances of academic success.

EXPECTED OUTCOMES

Through participation in small tutorial groups, underachieving high school freshmen and sophomores are expected to improve their reading skills.

MODE OF OPERATION

Under faculty supervision, parent aides work with small groups of approximately six ninth- and tenth-grade students for varying lengths of time. Each aide meets approximately 50 students per week and provides activities in remedial reading and study skills to supplement the students' regular classroom instruction.

PREVIOUS FINDINGS

In 1971-1972 and 1972-1973, evaluation focused on the delivery of services to project students. Observations revealed that all six participating schools were providing remedial help in reading; however, the form of the remedial services varied from school to school. Results of the Gates-MacGinitie Reading Test available in 1972-1973 from two of the participating schools indicated a statistically significant gain of 0.9 GE in reading-comprehension level for ninth-grade students but no significant change for tenth-grade students.

In 1973-1974, 60% of the project students met the criterion of a six-month gain in GE scores (in six months) on the Reading Comprehension and Vocabulary subtests of the Comprehensive Tests of Basic Skills, administered out of level. All students who received aid in mathematics returned to their regular classes at the end of the school year.

THE 1974-1975 EVALUATION

The current year's evaluation of the Reading Enrichment and Development project assessed participants' gains in reading level measured by out-of-level standardized tests.

IMPLEMENTATION

The project was fully implemented in two schools but not operational in the third school because of nonavailability of aides. Although instructional programs differed, in both schools tutorial services in reading were provided to ninth- and tenth-grade students.

At West Catholic High School for Girls, the 78 project participants were tenth graders selected on the basis of ninth-grade achievement. Three aides provided tutorial services to groups of six students for two to three sessions over a six-day cycle. The 40-minute tutorials concentrated on oral reading, comprehension, spelling, pronunciation, and vocabulary.

At West Catholic High School for Boys, approximately 90 first-semester participants were ninth graders selected on the basis of eighth-grade placement tests. Three fourths of these students attended daily 40-minute tutorials. The other students attended approximately three sessions per week on alternate days, and spent independent time working at the library or attending counseling sessions. In groups of approximately eight, they were tutored by four aides under the supervision of a reading specialist.

In the second semester, approximately half of the original students were retained in the project and others were added, totaling 78 participants. Because of the smaller number of students serviced, aides tutored groups as small as two to three students. Throughout the year, tutorials focused on recognizing words, drawing inferences, and finding relationships.

ATTAINMENT OF OBJECTIVES

Objective: To increase the reading achievement of underachieving high school freshman and sophomore students to the extent that 66% of them will make one year's gain in grade-equivalent (GE) score per academic year on the Reading Battery of the Comprehensive Tests of Basic Skills.

The objective was attained. Because the time between test administrations was 0.6 year instead of a full year, the criterion of 0.6 GE gain was used rather than a full year's gain.

The Reading Battery (Reading Comprehension and Vocabulary sections) of the Comprehensive Tests of Basic Skills (Level 3, Form S) was administered out-of-level in October 1974 and April 1975 to 213 ninth- and tenth-grade project students. The October Total Reading scores ranged from 3.4 to 12.9 GE, with a mean of 7.9; the April GE scores ranged from 3.3 to 12.9, with a mean of 8.9. Gains made by individual students are summarized in Table 1. Of the 213 students, 68% achieved the expected 0.6 GE gain, exceeding the 66% specified in the objective.

SUMMARY AND CONCLUSIONS

The Reading Enrichment and Development project helped students strengthen their reading skills at the beginning of high school, so they could be better equipped to cope with the curriculum. The project was fully implemented in two schools, but not implemented in the third.

Programs at the two schools differed, but the project's overall objective was attained. Of the 213 students who took the Total Reading Battery of the Comprehensive Tests of Basic Skills, 68% achieved at least the desired gain of 0.6 year in GE score in the six months from October to April. Thus the tutorials effectively helped project students to improve their reading skills.

TABLE 1

GAINS IN CTBS TOTAL READING SCORE FROM OCTOBER UNTIL APRIL (0.6 YEAR) BY STUDENTS IN READING ENRICHMENT AND DEVELOPMENT PROJECT

Gain in GE Score	Number of Students	Percentage
2.1 or more	28	13%
1.6 - 2.0	29	14
1.1 - 1.5	37	17
0.6 - 1.0	51	24
Less than 0.6	68	32
Total	213	100%

READING IMPROVEMENT THROUGH TEACHER EDUCATION
(A Component of the COMPREHENSIVE READING PROJECT)

The RITE project is designed to help train urban elementary school teachers to diagnose reading problems and to design and implement effective developmental reading programs. Teachers practice new techniques in their classrooms; on-site follow-up is provided by the project staff.

RATIONALE

The reading and language-arts deficiencies of target-area children are well documented. In order to help these children become successful learners, teachers should have a wide range of experience with various reading techniques and materials. Because many teachers lack this experience, the project supplements their preservice training with in-service training programs specifically designed to meet the reading needs of teachers of urban school children.

EXPECTED OUTCOMES

With the help of the project specialists, teachers should develop competence in using the Directed Reading Activity approach, in diagnosing the individual pupil's reading needs, in prescribing independent activities for the pupil, and in utilizing efficient classroom-management techniques.

MODE OF OPERATION

Seven RITE reading specialists provide services for 294 teachers in 26 Title I schools. Of the teachers receiving services, 33 had no classroom experience prior to this year. They receive help in classroom management and organization and in lesson planning. The project specialists also confer with principals and reading coordinators about specific needs of their schools.

Services provided to teachers include conferences, observations, demonstration lessons, and workshops. Conferences are arranged to discuss problems and share information on specific techniques. Observations are provided either at the teacher's request, or at the principal's request with the teacher's approval. Observations are preceded and followed by conferences to discuss improvement of instructional techniques.

Demonstration lessons are planned in advance by a project specialist. Planning activities include at least one preliminary observation of the children and a specialist/teacher conference which prepares the teacher to watch for specific occurrences during the lesson. Each demonstration lesson is followed by a conference about the lesson and the teacher's observations.

Workshops are of three types: one, jointly planned by the project specialist and the school's reading coordinator, deals with a specific need within a school; another, planned for all teachers in several schools, deals with more general topics; the third is planned for clusters of teachers with similar needs regardless of school (such as kindergarten teachers or beginning teachers) and deals with topics of concern to these special interest groups. The workshops frequently involve resource persons from outside the project team and deal with such topics as use of the Peabody Language Development Kits, specific kindergarten-teaching information, techniques of developing language and perceptual skills, and reading readiness.

PREVIOUS FINDINGS

Evaluation of RITE during its first year of operation was formative and focused on the implementation of services. Project records indicated that RITE was delivering the types of services which should improve teachers' skill in reading instruction. Principals' ratings of the specialists and the project as a whole indicated satisfaction with their effectiveness.

The 1973-1974 evaluation focused on the effect of RITE services on specific teacher competencies. Results of observations, the RITE Case Study, and the RITE Teacher Rating Scale indicated that teachers receiving these services were managing their reading lessons effectively and (at least at the primary level) seemed able to make use of test results in teaching reading. There was limited evidence of progress toward the attainment of those objectives which related to individualizing instruction.

THE 1974-1975 EVALUATION

This year's evaluation of the RITE project examined the effect of the project's services on specific teacher competencies by fall and spring administrations of formal assessment measures (observational instruments, case studies, and a self-rating scale of competency) to beginning teachers.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. Project records indicated that from September to May, the seven RITE reading specialists made 973 half-day visits to participating schools, providing 3,649 service contacts to school personnel. Of these contacts, 861 (24%) were conferences with principals or school reading coordinators, and 2,788 (76%) were direct services to individual classroom teachers, 897 of which were for new teachers.

Of the individual contacts with teachers, 16% were classroom observations, 26% were classroom demonstrations, and 58% were scheduled conferences. Topics for these contacts were based on the individual teacher's needs, and included the directed reading activity (39%), classroom-management techniques (27%), independent activities (18%), and diagnosis and prescription for reading needs (16%).

RITE specialists also conducted 80 group in-service meetings, of five different types. Regional in-service days were full-day reading seminars for faculities of several schools, covering many topics. Reading-series group meetings were 90-minute sessions which provided teachers with in-depth knowledge of their respective schools' new basal series. School group meetings were conducted for the staffs of individual schools. Half-day group meetings were held for new teachers and for kindergarten teachers.

ATTAINMENT OF OBJECTIVES

Three instruments--the RITE Observational Checklist, Teacher Rating Scale, and Case Study--provided information concerning attainment of RITE objectives. The evaluation team used the RITE Observational Checklist when visiting project classes. Twelve beginning teachers receiving RITE services were selected for observation. An evaluator visited each teacher's classroom for approximately 45 minutes in November and again in May. Project-specific items indicated basic information about each classroom and the presence or absence of indicators for Objectives 1, 3, and 4. An increase in the percentage of observed indicators from November to May was considered evidence of objective attainment.

The RITE Teacher Rating Scale, which assessed teachers' perceptions of their reading-instruction competence, provided information related to all objectives. This instrument listed 24 instructional competencies on which respondents rated their knowledge on a 1 (I know very little about this) to 4 (I know this very well) scale. The ratings were summed for each respondent to obtain a total score, with a possible range of 24 to 96.

To determine the project's effect on teachers' perceptions of their reading-instruction competence, the Solomon four-group design was used with the Teacher Rating Scale. Approximately half the project's beginning teachers responded to the rating scale at a RITE workshop in October. At the same time, a group of nonproject beginning teachers received the rating scale by mail. In May, a posttest was administered to these two groups and two additional beginning teacher groups (one project, one nonproject). Mean scores for the four groups are presented in Table 1. Results of a two-way analysis of variance on posttest scores indicated that there were no significant differences among the groups; there were no effects for either the pretest condition ($F=1.99$, $df=1/28$, $p>.05$) or participation in the project ($F=2.33$, $df=1/28$, $p>.05$). However, there was a substantial positive change in project teachers' self-perceptions.

The RITE Case Study provided information relevant to Objectives 1 and 2. It was designed to assess teachers' knowledge of two aspects of reading instruction--implementation of a directed reading activity (DRA), and interpretation and use of test results. Both the primary and intermediate forms of the case study presented teachers with simulated situations, and they described in writing the procedures they would use in their classrooms.

The pretest, given to the new RITE teachers not included in the observation group, was administered at two RITE beginning teachers' workshops in October. The posttest was administered in March. Each individual's pretest and posttest papers (without identification) were scored by the same panel of three RITE staff members. Raters used predetermined keys to score the responses, and the score for each paper was the average of the three ratings.

Interrater reliability estimates for the four test sections were obtained for each of the four rating teams. The 16 reliability estimates ranged from +.62 to +1.00 with 13 of them greater than +.90. For each section and form of the test, mean pretest and posttest scores were compared by a correlated $\underline{t}$ test.

Objective 1: The teachers will implement appropriately a directed reading activity when teaching reading, using the basal readers of the school, and will incorporate language experience and individualized reading activities into the total reading experience of the children.

This objective was attained.

All 12 observed teachers used the basal approach to reading instruction. In November, eight (67%) of the teachers were appropriately implementing some phase of a DRA. By May, all of the teachers demonstrated appropriate implementation.

The first section of the RITE Case Study was used to assess teachers' knowledge of the DRA. Seven primary and 11 intermediate beginning teachers responded to this portion. The maximum possible score for the section was 12. Pretest scores ranged from 1 to 6, and posttest scores ranged from 0.7 to 11.7. Mean scores are presented in Table 2 (first two lines of data).

For both primary and intermediate teachers, there was a significant increase in mean score from pretest to posttest (primary $\underline{t}=6.42$, $p<.05$; intermediate $\underline{t}=4.76$, $p<.05$). Thus findings from this subtest and from the classroom observations indicated that beginning teachers did increase their abilities to plan and implement a DRA.

Objective 2: The teachers will increase their skill in diagnosing and prescribing for individual pupil reading needs, as indicated by ability ($\underline{a}$) to use the results of basal reader unit and mastery tests to guide the contents of their reteaching cycle, *(b) to effectively organize and use the school's criterion-referenced testing program, (c) to administer and interpret group informal reading inventories as needed, (d) to interpret standardized test results, and (e) to utilize the results of all testing and observations for recognition and referral of specific children for regrouping or for additional testing by special supportive personnel.*

This objective was partially attained.

The second section of the RITE Case Study measured teachers' proficiency in diagnosing and prescribing for individual reading needs. Eleven primary and nine intermediate beginning teachers responded to this section. A score of six points indicated mastery of the material, and pretest and posttest scores both ranged from 0 to 6. Mean scores are presented in Table 2 (last two lines of data).

There was no significant difference between pretest and posttest mean scores for the primary teachers ($t=.96$, $p>.05$). Intermediate teachers' posttest mean score was significantly higher than their pretest mean score ($t=4.03$, $p<.05$).

Objective 3: The teachers will provide purposeful and varied independent activities designed to meet individual pupil needs, as indicated by ability (a) to develop classroom reading-activity centers, (b) to use reading games and a variety of worksheets and materials for creative activities as related extensions of the directed reading lesson, and (c) to include opportunities for use of the school library and learning center in daily work assignments of pupils.

This objective was partially attained. During the postobservation, there were more variety in reading activities and more grouping flexibility, but patterns of use of independent activities were similar to those during the preobservation.

Items on the RITE Observational Checklist described class grouping patterns, kinds of independent activities, manner in which the activities were assigned, and whether activities were used by the whole class, groups, or individuals.

In November, nine (75%) of the observed classes were divided into three small groups, one class used whole-group instruction, and there were no instances of individuals working alone. The reading groups were fixed, with no regrouping for specific skill development. In 22 observations of independent activities, the most common activity was the commercially prepared worksheet, and the most frequently observed use pattern was an assigned activity used by an entire reading group.

In May, seven (58%) of the observed classes were divided into three small groups, no classes used whole-group organization, and three classes had combinations of groups and individuals. There were two instances of regrouping of students for specific skill development. In 30 observations of independent activities, workbooks and commercial worksheets were commonly used, and the most frequently observed use pattern again was an assigned activity used by an entire reading group.

Objective 4: The teacher will organize and manage effectively her classroom reading program by utilizing available management techniques and procedures to provide for individual and group needs, as indicated by ability (a) to keep current individual pupil skill-profile records, (b) to use classroom equipment and space to best advantage, (c) to use effective organizational mechanics so the various reading groups can engage in different activities during the scheduled reading period, and (d) to use paraprofessional help efficiently.

This objective was attained.

Increases in the percentage of occurrence for all indicators from pretest to posttest were apparent from data noted on the RITE Observational Checklist. In November, four of the 12 beginning teachers were maintaining appropriate skill records. Eight instructed only one reading group during a 45- to 60-minute reading lesson. In all cases but one, teachers were close to the group being instructed. Of the seven teachers with aides, four used their services appropriately. Four of the twelve teachers received ratings of "good" or "excellent" for reading-lesson management.

In May, teachers were maintaining appropriate skill records, and ten were providing instruction to more than one reading group. All were close to the group they were teaching, and all teachers with aides used their services appropriately. Seven of the 12 teachers received ratings of "good" or "excellent" for reading-lesson management.

SUMMARY AND CONCLUSIONS

The RITE project provided in-service training in reading instruction to elementary school teachers, and helped principals and reading coordinators to organize their school reading programs.

The project's intended mode of operation was fully implemented. RITE specialists provided 3,649 service contacts to school personnel, and conducted 80 in-service meetings.

To assess attainment of objectives, three pretest-posttest procedures were used with beginning teachers. Results of the RITE Teacher Rating Scale indicated no significant difference between project and nonproject teachers' perceptions of their reading-instruction competencies.

The results of classroom observations and pretest and posttest administrations of the RITE Case Study indicated that two project objectives were fully attained and two partially attained. The project was most successful in helping new teachers implement a DRA and manage reading lessons. There was less success in developing beginning teachers' diagnosis and prescription skills, and in providing individualized, independent activities as a part of the reading program--perhaps the most difficult skills even for experienced teachers to develop. On the whole, the RITE project provided a valuable service to teachers.

TABLE 1

MEAN SELF-RATING SCORES OF RITE BEGINNING TEACHERS AND COMPARISON BEGINNING TEACHERS

Group	N	October Pretest	May Posttest	Change
Pretested RITE	8	52.0	73.0	+ 21.0
Pretested Comparison	8	72.0	70.0	- 2.0
Unpretested RITE	8	--	70.0	--
Unpretested Comparison	8	--	64.0	--

TABLE 2

MEAN SCORES OF A SAMPLE OF RITE BEGINNING TEACHERS ON RITE-CASE-STUDY SUBTESTS

Subtest and Form	N	October Pretest	March Posttest	Change
Planning a DRA:				
Primary Form	7	2.4	7.7	+ 5.3*
Intermediate Form	12	3.2	7.0	+ 3.8*
Using Test Scores:				
Primary Form	11	2.4	3.1	+ 0.7
Intermediate Form	9	2.2	3.4	+ 1.2*

*Statistically significant beyond the .05 level.

SUMMER ADVENTURES IN LEARNING
(A Component of the COMPREHENSIVE READING PROJECT)

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

SAIL is a "contracted services" project which provides tutoring in language arts (including reading) combined with a summer art and recreational program designed to increase motivation.

RATIONALE

The participating target-area pupils have failed to master the basic reading skills, and are reading below grade level. Many pupils also tend to drop in reading level during the summer. The project is based upon the assumption that supplementary services during the summer can help the pupils maintain and/or improve their reading levels and improve their word-attack skills.

EXPECTED OUTCOMES

It is expected that through participation in the SAIL project pupils will maintain and/or increase their achievement levels in reading, will have increased motivation for learning, and will improve their language-arts skills.

MODE OF OPERATION

SAIL centers operate in public school sites and serve both public and parochial school pupils. At each center, approximately 75 pupils are instructed in small groups by high school student tutors under the direction of an experienced teacher and two associate teachers. Students are grouped by reading level.

SAIL's reading-instruction program is based on Reader's Digest Skill Builders. For follow-up and variety, the SRA Reading Laboratory, "We Are Black," is used. Scott-Foresman picture dictionaries also are available for reference and for developing basic dictionary skills.

In addition to the basic reading activities, the children engage in a variety of written experiences, daily art instruction, and a daily period of supervised physical activity. The children are given opportunities to work with cameras and tape recorders.

Each child also participates in five all-day field trips to places of interest.

PREVIOUS FINDINGS

In the formative years, 1970 and 1971, evaluations were conducted by the project administrator. Centers were found to be working efficiently, absenteeism was low, and ratings by staff and parents were favorable.

In the evaluation of 1972 through 1974, the percentage of pupils at least maintaining book level over the summer has greatly exceeded the criterion of 60%, and the percentage of pupils showing improvement as indicated by a change in book level exceeded the criterion of 35%.

The average attendance rate for all SAIL centers has been at or near the criterion rate of 80%. Thus the project appeared to be motivating its students to participate in learning activities.

In 1974, the project did not attain its language-arts objective. However, this may be attributed in part to problems in measuring improvement in language arts over a short time period.

THE 1974-1975 EVALUATION

This year's evaluation focused on the extent to which the project was successful in having the pupils (a) improve their word-attack skills (as measured by the Sight and Sound Inventory), (b) maintain and/or increase their reading levels, and (c) participate in learning activities (as measured by pupil attendance rate).

IMPLEMENTATION

The project's intended mode of operation was fully implemented. The four SAIL centers served both public and parochial school pupils. The number of pupils in each center ranged from 66 to 90, with a mean of 81.

At each center, pupils were instructed in groups of three to five by high school student tutors under the direction of an experienced teacher and two associate teachers. The student tutors attended half-hour staff-development sessions daily, and were responsible for submitting lesson plans and updating student attendance rolls.

SAIL's reading-instruction program was based on Reader's Digest Skill Builders. For follow-up and variety, supplementary materials were used. In addition to basic reading activities, the children were involved in written experiences, daily art instruction, and a daily period of supervised physical activity. The pupils had opportunities to work with cameras and tape recorders. Each child also participated in five all-day field trips.

ATTAINMENT OF OBJECTIVES

Objective 1: To maintain and/or increase project pupils' achievement levels in reading during the summer recess period to the extent that (a) differences between pretest and posttest scores on the Sight and Sound Inventory will be statistically significant at the .05 level, and (b) 35% of the pupils will gain at least one book level on the Reader's Digest Skill Builders, and 60% will at least maintain the same level (i.e., will not regress).

This objective was attained.

The Sight and Sound Inventory was administered to 172 pupils during the first and fifth weeks of the project. The mean pretest score was 72; the mean posttest score was 76. A Sandler A statistic of 0.043 indicated that this four-point gain was statistically significant at the .05 level.

Further analysis of the Sight and Sound Inventory results revealed that 126 (73%) of the 172 pupils had at least maintained their score from pretest to posttest. Eighty-two pupils (48%) attained mastery on the pretest (76 of the 85 items correct), and 100 pupils (58%) attained mastery on the posttest.

Examination of project participants' records of progress on the Reader's Digest Skill Builders indicated that 114 (36%) of the 313 pupils gained at least one book level, and 306 (98%) at least maintained their reading level. In both cases, the criterion was exceeded.

Objective 2: To increase the motivation for learning of the project children during the summer recess, as indicated by an average daily attendance of at least 75% during the overall program.

This objective was attained.

During the six-week summer term, attendance records were maintained by the project coordinator. The average attendance rate over all SAIL centers was 88%, which exceeded the stated 75% criterion.

Objective 3: To improve the language-arts skills of project pupils to the extent evidenced by improvement in pupils' written selections in response to a stimulus picture during the first and final weeks of the project.

This objective was attained.

An evaluator-developed picture-stimulus test was administered to all SAIL pupils at the beginning and end of the project. The test was designed to measure samples of children's written language-arts abilities, using as an index the numbers of words, different words, and sentences written. Fifteen randomly-selected pupils from each grade (3-6) took the test. Results are summarized in Table 1.

Of the 60 pupils, 42 (70%) wrote a greater number of words on the posttest story than on the pretest. The average posttest story was 13.4 words longer. A Sandler A statistic indicated that the increase was significant at the .005 level.

Forty-two pupils (again 70%) wrote more different words on the posttest story than on the pretest. Posttest stories averaged 12.6 words longer. The Sandler A indicated that the increase was significant at the .0005 level.

Of the 60 pupils, 39 (65%) wrote more sentences on the posttest story than on the pretest. Posttest stories were an average of 1.8 sentences longer. Again the Sandler A indicated significance at the .0005 level.

SUMMARY AND CONCLUSIONS

The Summer Adventures in Learning project was established to help low-achieving target-area pupils improve their word-attack skills and maintain and/or improve their reading levels during vacation. The project's intended mode of operation was fully implemented. SAIL served 313 pupils in Grades 3-6 at four centers.

Through participation in the SAIL project, pupils maintained their reading-achievement levels, improved their language-arts and phonics skills, and increased their motivation for learning. All the project's stated objectives were attained.

Records of pupils progress on the Reader's Digest Skill Builders indicated that almost all SAIL pupils had at least maintained their reading levels, and 36% of them had improved their levels. Project pupils significantly increased their scores on the Sight and Sound Inventory between pretest and posttest. Thus, reading and phonics objectives were attained. As indicated by significant gains on the picture-stimulus test, the project pupils were also considered to have improved their language-arts skills.

The average daily attendance rate of 88% exceeded the 75% criterion and indicated that the project made progress toward increasing participants' motivation for learning.

TABLE 1

SCORES (WORD AND SENTENCE COUNTS) OF SAIL PARTICIPANTS ON PICTURE-STIMULUS TEST

Variable	Pretest Mean	Posttest Mean	Gain	df	A	p
Total Words	40.1	53.5	+13.4	59	.132	<.005
Different Words	25.5	38.1	+12.6	59	.059	<.0005
Total Sentences	3.3	5.1	+ 1.8	59	.095	<.0005

SUMMER READING READINESS
(A Component of the COMPREHENSIVE READING PROJECT)

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

The Summer Reading Readiness project is designed to provide formal learning experiences for two groups of children: (a) children about to enter the first grade with no kindergarten or formal preschool experiences, and (b) children who have completed the first grade with less-than-satisfactory academic achievement. The project attempts to strengthen in these children those readiness skills required for successful involvement in the relatively structured first-grade reading program.

RATIONALE

Because nonpublic schools generally do not provide formal kindergarten programs, many children entering the first grade experience unsatisfactory academic achievement. Most pupils participating in this summer project are enrolled in Philadelphia nonpublic schools. However, eligible public school pupils also attend the project. Participants generally have had no formal preschool experience designed to develop readiness skills identified as prerequisite for success in the first grade.

EXPECTED OUTCOMES

The primary goal of the project is to provide appropriate learning experiences designed to develop a stable foundation of readiness skills for children entering the first grade of formal schooling.

MODE OF OPERATION

Eligible children are recruited from target schools and screened into nonpublic school centers. They are organized into units of approximately 40 children each. Three teachers have the responsibility of developing and implementing a suitable program for each unit.

The project operates daily, from 8:45 until 11:45, during a six-week period, using instructional materials and equipment provided by the schools themselves and by previous years' Title I funds.

PREVIOUS FINDINGS

During the summer of 1972, participating children who attended with regularity made significant improvement in reading-readiness and basic reading skills. Follow-up interviews with teachers revealed that participating children differed from non-participating children in achievement levels and classroom performance in Year 1.

During the summer of 1973, the difference between mean pretest and posttest scores on the Philadelphia Readiness Test were statistically significant, indicating that the objective of developing readiness skills of pre-first-grade children had been attained.

The 1974 evaluation focused upon the development of aural comprehension skills in pre-first-year pupils and the strengthening of reading-readiness skills in underachieving first-year pupils. The expected proportion of pupils attaining mastery was not reached by either group. The appropriateness of the criteria of success and the reasonableness of the expected proportions of pupils attaining mastery were questioned.

THE 1974-1975 EVALUATION

In 1975, evaluation of the Summer Reading Readiness project again focused upon the development of aural comprehension skills in pre-first-year pupils, and upon the strengthening of reading-readiness skills in underachieving first-year pupils.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. During a six-week summer session, 1,211 pre-first-year pupils and 581 underachieving first-year pupils from nonpublic and public target-area schools participated in the project. Forty-nine units were organized in 39 nonpublic school centers, with 150 teachers supported by six supervisors.

Each center contained sufficient instructional materials and equipment to provide relevant learning experiences for each pupil. Observations by the six supervisors (85 observations), the Coordinator of Nonpublic School Projects (11), and the evaluation team (11) revealed that most activities were appropriate for achieving the project's expectations.

ATTAINMENT OF OBJECTIVES

Objective 1: To improve the aural comprehension skills (abilities to pay attention to, organize, interpret, infer from, and retain what has been heard) of pre-first-year children who attend at least 75% of the project sessions, as measured by Part 4 (Aural Comprehension) of the Stanford Early School Achievement Test (SESAT). A mastery score of 18 or more correct items (maximum score=28) for 60% of the children will be the measurable criterion of success for the project.

This objective was attained.

The Stanford Early School Achievement Test (SESAT) was administered to all pre-first-year pupils during the final week of the project. Scores on all four parts of the test were forwarded to the pupils' respective schools to be used as entry-level achievement data.

Only Part 4 (Aural Comprehension) was specifically related to this objective. The criterion of 18 correct items was selected because it was the mean score obtained by pupils completing a full year of public kindergarten in Philadelphia's Districts 2 and 4. In these two districts, the project operated exclusively in nonpublic schools, serving both nonpublic and public school pupils. It was expected that participants who attended a minimum number of project sessions would score as well as public school pupils who had completed a full year of kindergarten.

Aural comprehension scores were categorized according to the attendance of each pupil. Of the 1,030 pre-first-year project pupils who took the SESAT, 820 had attended at least 21 of the 28 half-day sessions. Of these pupils, 501 (61%) attained the mastery score of 18 items correct, exceeding the 60% specified in the objective.

Objective 2: To develop the reading-readiness skills of underachieving first-year children who attend at least 75% of the project sessions, as indicated by teacher records of the children's mastery of consonants, vowels, and sight words listed on the Summer Readiness Project Diagnostic Profile and Sight Word List.

This objective was attained.

It was expected that 60% of the underachieving first-year pupils would improve their basic reading-readiness skills, indicated by (a) mastery of consonants and vowels specified for their respective entry levels, recorded on the Diagnostic Profile, and (b) recognition of at least 15 new words on the Sight Word List, or mastery of the entire list.

The Diagnostic Profile specified those reading-readiness skills required for a successful introduction to the first-year reading program. The profile consisted of four heirarchical skill levels, based on the premise that children develop reading-readiness skills in a specific order of difficulty. The Sight Word List included 60 words (preprimer and primer) found in most current basal reading series. Pretest ratings on the profile and word list were provided by pupils' first-year teachers; posttest ratings were recorded by project teachers.

For the 581 underachieving first-year pupils enrolled in the project, 530 Diagnostic Profiles and 533 Sight Word Lists were completed. Of the pupils with complete records, 311 attended at least 75% of the project sessions. Of them, 193 (62%) attained the mastery criterion on the Diagnostic Profile, and 190 (60%) attained the mastery criterion on the Sight Word List. Thus the objective was attained.

SUMMARY AND CONCLUSIONS

The Summer Reading Readiness project was created to provide formal preschool experiences for target-area pupils who had not developed those reading-readiness skills identified as necessary for success in first grade. Most of these children had not experienced formal kindergarten classes, and some had completed the first-grade program with less-than-satisfactory academic progress.

The current year's evaluation focused on developing aural comprehension skills in pre-first-year pupils, and strengthening reading-readiness skills in underachieving first-year pupils.

The project was fully implemented according to its intended mode of operation, and both of its stated objectives were attained. In development of aural comprehension skills, pre-first-year pupils who completed the six-week summer program performed as well as comparison pupils who had completed a full year of kindergarten. Underachieving first-year pupils strengthened those reading-readiness skills required for successful completion of a structured first-grade reading program.

COMPUTER-MANAGED INSTRUCTION

Computer-Managed Instruction (CMI) facilitates individualization of instruction in reading and mathematics within a system of mass education. Diagnosis of needs, prescriptions for instruction, and frequent progress assessments guide individual pupils to mastery of the respective reading and mathematics competencies. CMI is the product of the integration of three projects: Computer-Assisted Instruction, Instructional Management, and Teaching Basic Reading Skills--A Systems Approach.

RATIONALE

The underlying philosophy of CMI recognizes the importance of individual differences in providing experiences which enable each individual to develop his full potential. Educators generally agree that when unique experiences are provided for each pupil, the chances of school success are enhanced. This approach has not been adopted widely because of the difficulties encountered when more than a few pupils receive instruction. Management of the varied assortment of instructional materials, the extensive variety of possible prescriptions, and the record of performance for each pupil are some of the problems that must be overcome to implement a truly individualized program. Computer technology provides both the structure and the flexibility to overcome these difficulties of individualization within a mass-education system.

EXPECTED OUTCOMES

The goal of the project is to raise the achievement of participating pupils in reading and in mathematics to a higher level than would normally be expected in the schools. It is expected that a high proportion of pupils will show mastery of the respective skills as they move through the instructional sequences.

Staff-development sessions and frequent classroom visits by the CMI curriculum specialists are expected to assist participating teachers in individualizing instruction in their classrooms.

MODE OF OPERATION

The CMI project requires the development and implementation of a computer-managed and computer-assisted instruction system to diagnose pupil needs, prescribe necessary instruction, assess individual progress, and manage all instructional activities in reading for Grades 1-12 and in mathematics for Grades 1-6. In general, computer-generated prescriptions identify the appropriate instructional materials for each pupil, based on either diagnostic testing or criterion-referenced tests. The prescribed instructional materials have three levels of difficulty, with the second and third levels progressively easier than the first level. Depending on the pupil's score on the first-level posttest, the computer either prescribes the second or third level or generates a new prescription. As the pupil progresses through the reading and/or mathematics curricula, individual pupil records are kept by the computer. Numerous computer reports are available to facilitate teachers' and administrators' examination and evaluation of pupil progress either by pupil, by class, or by school.

The computer prescriptions assign instructional materials in several media and in a variety of instructional strategies. Computer-assisted instruction (on-line tutorial instruction) is a major component of the elementary reading program (Grades 1-3), providing individual reinforcement and/or remediation of decoding and comprehension skills. These computer presentations are synchronized with audiotape cassettes and are composed of learning sequences of increasing complexity to allow pupils to work at their own rate and to minimize their frustration in learning. Elementary pupils also receive drill and practice in mathematics at the computer. Comprehension skills are taught on-line for pupils at the secondary level.

In addition to the computer terminals, each CMI classroom has a variety of instructional aids and programmed instructional materials to be used in individual pupil assignments or in small-group instruction. The teacher also provides tutorial instruction for pupils with special needs.

In the development of CMI, curriculum specialists select and/or write instructional materials matched to reading and mathematics competency objectives. The competency objectives (Philadelphia Reading Competencies and Philadelphia Mathematics Competencies) are the core of the program and provide the framework for development of the criterion-referenced tests. Computer programs are designed and written to increase the efficiency of the management system.

Staff development and in-class support for teachers are ongoing activities of the CMI curriculum specialists and are considered necessary to the implementation of the individualized instructional program.

PREVIOUS FINDINGS

Past evaluations of the three predecessor projects (Computer-Assisted Instruction, Instructional Management, and Teaching Basic Reading Skills--A Systems Approach) generally showed that, where the projects were appropriately implemented, participating pupils had significantly greater achievement than comparison pupils. The evaluations documented that the individualized activities did provide learning experiences which the pupils were able to master at desired rates, as indicated by both the projects' internal monitoring systems and external criterion tests.

Teachers' and pupils' attitudes toward the projects were found to be positive. In general, teachers viewed the computer as an excellent motivational device which enabled their pupils to succeed in formal learning. Also, the teachers felt that without the computer's record keeping and scheduling, individualization of instruction would not be possible in their classrooms.

THE 1974-1975 EVALUATION

Because this was the project's first year following the reorganization, the current evaluation was in general formative, seeking to determine the effectiveness of the various instructional sequences in having pupils attain specified levels of mastery on criterion-referenced tests. The degree to which the instructional program was appropriately implemented into the schools was also examined.

IMPLEMENTATION

The reorganized project was partially implemented in 1974-1975. By May 1975 the computer-managed secondary reading component was fully operational in the pilot school. The primary-grade mathematics component began in its pilot school in mid-May. Although the original primary-grade reading center operated as intended throughout the year, the second center was not fully operational by year's end due to budget cutbacks. The project continued to serve approximately 2,000 secondary pupils in the mathematics-reading reinforcement centers in which an individualized sequence of instructional objectives was identified, based on measurements of each pupil's learning characteristics and mastery of the respective content areas.

The evaluator's observational visits during this year of reorganization concentrated on two sites: the computer-managed secondary reading pilot school and the second primary-grade reading center. Weekly observations in the secondary reading school revealed that by May, with continuous support from project staff, the participating teachers were fully able to individualize reading instruction. Because the pilot school was new this year, project staff spent most of September and October assisting teachers in unpacking and storing materials and organizing reading centers. The staff then trained teachers to operate the computer-managed instruction centers.

All elements of CMI secondary reading centers in the pilot school were operational by May. The needs of the approximately 350 pupils were diagnosed, and prescriptions identifying specific instructional materials were generated for each pupil. Teachers and aides spent much of their time assisting pupils in procuring necessary instructional materials, aids, and criterion-referenced tests. Clarification of directions for individualized tasks and control of pupil behavior occupied the remainder of teacher and aide time. After a pupil completed all assignments in a prescription, the appropriate criterion-referenced test was taken, after which the computer either prescribed an easier level or generated a new prescription. Teachers received frequent computer-generated pupil-status reports, which facilitated their planning and permitted pupils to see their progress.

The Computer-Assisted Instruction (CAI) reading-comprehension program was integrated into the pilot school. By the year's end, the project staff and center teachers were planning the development and selection of off-line instructional materials to remediate skills not learned on-line.

During most observations, pupils used a variety of instructional materials including computer teletypes, cassette players, filmstrip projectors, records, and several programmed instruction series. The prescription format initially gave pupils latitude in selecting instructional materials. However, by midyear teachers reported that revisions were necessary in the secondary reading pilot program, and requested more concentrated and structured pupil assignments. The prescription sheet was redesigned and instead of a choice from three assignments, one specific task for each skill with options in reinforcement activities was assigned. More frequent assessment of pupil progress was implemented by development of "Skill Tests," and new report formats were developed to provide teachers with more detailed information on pupil progress.

Center teachers found that the pupils generally experienced difficulty in CAI due to deficiency in grammar skills. Teachers reported that on many occasions they drilled a whole class on basic grammar skills so the students could proceed on-line. (The teachers suggested that the project involve the pupils' English teachers in remediating these deficiencies.)

At the second primary-grade reading center, the project component combining computer-assisted instruction and audiotape cassettes provided individual reinforcement and/or remediation of decoding and comprehension skills. The center was not able to operate fully as intended because necessary instructional materials and aids could not be purchased due to unavailability of funds. While the original primary-grade reading center operated as intended, its staff reported that the regular classroom reading instruction was interrupted due to a succession of substitute teachers for the participating third graders.

A group of fifth- and sixth-grade pupils who had scored below the 16th percentile on the California Achievement Tests was exposed to the program at the second reading center on a trial basis. Informal reading inventories administered by the center teacher revealed that these pupils responded favorably to this instruction. The teacher credited the computer audiotape cassette presentations with holding the interest of pupils who otherwise tended to avoid new learning tasks or to follow directions poorly.

By May, the project staff had completed revision of the Philadelphia Mathematics Competencies Tests to fit the CMI format for its primary-grade mathematics component. Also, because ordered instructional materials were not received due to unavailability of funds, individualized instructional materials had to be developed by the project staff for all levels.

ATTAINMENT OF OBJECTIVES

Objective 1a: To teach primary-grade pupils the basic skills of decoding and comprehension, study skills, and appreciation for literature, so that 80% of the pupils will evidence 90% mastery on the respective Read-On Criterion Tests.

This objective was attained.

During the last three months of the school year, all 95 pupils in the original primary-grade reading center took 165 Read-On Criterion Tests in Reading as a part of their regular instructional program. Computer summaries of the results revealed that all the pupils (not just 80%) evidenced mastery on these tests.

Objective 1b: To teach primary-grade pupils the basic skills of decoding and comprehension, study skills, and appreciation for literature, so that by the end of third grade, project pupils will score higher than nonproject pupils on a phonics inventory, informal reading inventories, and the CAT-70 Reading subtest.

This objective was partially attained. Project pupils did not score higher than nonparticipants on the phonics inventory or on the CAT-70 Reading subtest; however, they exhibited more than expected growth on an informal reading inventory.

Thirteen third graders who participated in the project for three years and had CAT scores for both 1974 and 1975 were matched by May 1974 CAT-70 reading scores with 13 third graders in a feeder school. Scores for both groups were obtained from the results of the June 1975 district testing with the Sight and Sound Inventory, Parts A and B (a modification of the Botel Phonics Inventory), and from the citywide CAT testing in February. A group informal reading inventory developed for the Stern Reading Series was administered to the project's 24 third graders in September and June. Since the feeder-school pupils did not use the Stern series, they were not tested with this IRI.

Posttest scores on the phonics inventory and on the CAT Reading subtest for the matched pupils were compared by means of correlated t tests. Pupil gains on the IRI were translated into years of growth (two books per year through Level 3^2 and one book from Level 4 on) and analyzed descriptively.

There was no significant difference in score ($p > .20$) between pupils in the original primary grade reading center (mean score=67.2) and the matched feeder-school pupils (73.3) on the Sight and Sound Inventory. Although project pupils did not exceed the comparison pupils, both groups evidenced a high level of mastery. Comparisons of CAT-70 Reading subtest results also revealed no significant difference ($p > .20$) between the two groups (project pupils' mean grade equivalent = 2.7; feeder-school matched pupils = 2.9).

On the IRI, project pupils in the original center using the Stern series averaged more than one year's growth (1.1) from September to June. Pupils in the second center also exceeded one year's growth (1.2) on the Merrill Linguistics Informal Reading Inventory. Thus IRI results indicated that project pupils generally exceeded the growth in reading that has normally been observed in these schools.

Objective 1c: To teach primary-grade pupils the basic skills of decoding and comprehension, study skills, and appreciation for literature, so that by the end of third grade, project pupils will attain on-level status on the CAT-70 norms.

This objective was not attained.

Reading subtest Achievement Development Scale Score (ADSS) data were collected for participating third-grade pupils from February 1975 CAT-70 city-wide testing. Scores were compared in ADSS units with national norms for grade and time of year. The difference between the project pupils' mean score and the norm was tested for significance by use of the standard error of measurement. If the project pupils' mean score fell below the norm by an amount larger than that expected by chance ($p < .01$), the objective would be considered not attained.

The difference between between the project pupils' mean and the norm was greater than expected by chance. While a difference of 9.1 ADSS units could be expected by chance ($p < .01$), the project pupils' mean score was 42 ADSS units below the norm. Only four of the 17 third graders for whom CAT-70 reading scores were available attained on-level status.

Objective 2: To teach primary-grade pupils the fundamentals of arithmetic so that 80% of the pupils will evidence 90% mastery on the respective Philadelphia Mathematics Competencies Tests.

The attainment of this objective could not be determined. Because the primary-grade mathematics component was not operational until the last five weeks of school, no pupils completed the respective Philadelphia Mathematics Competencies Tests.

However, in the five weeks of component operation, the 26 participating pupils attained 90% mastery on an average of two mathematics-skills progress tests. This indicated that project instructional materials may have been effective in remediating these pupils' deficiencies in mathematics.

Objective 3: To teach intermediate- and secondary-grade pupils basic skills in reading so that 80% of the pupils will evidence 90% mastery on the respective Reading Competencies Tests.

This objective was partially attained. Specified mastery rates were attained through Level 6, but not at higher levels.

The percentage of pupils attaining 90% mastery was determined for pupils of the teacher who had implemented the project as intended for the second half of the school year. The modified Reading Competencies Tests (Levels 2-8 for decoding and Levels 2-6 for comprehension) were administered as part of the program. However, teacher feedback and evaluator observation indicated that the tests may have been unreliable. In Levels 7-14, the comprehension tests of the regular computer-assisted instruction program were used.

Results of the Reading Competencies Tests showed that all 50 pupils who had completed the prerequisite instruction had attained mastery on the respective tests. For all decoding competencies except Level 6, all pupils passed the pretest and therefore did not take the posttest.

Summaries of the computer-assisted instruction tests, however, showed that an average of only 28% of the 11 pupils attained mastery on the first four topics. Mastery rates ranged from five pupils mastering Topic 1, to one pupil mastering Topic 4.

Objective 4: To enable pupils of varying abilities to master the respective reading and mathematics skills at comparable rates.

This objective was attained.

On both the primary-grade Read-On Criterion Tests and the secondary-grade Philadelphia Reading Competencies Tests, all participating pupils demonstrated mastery. CAI tests were not used in this analysis because so few pupils reached the upper-level skills. These results indicated that pupils of varying abilities were able to master the respective skills at comparable rates; i.e., pupils were able to master their respective skills regardless of initial ability level.

Objective 5: To train teachers to individualize instruction so that they will evidence both competency in managing the individualized classroom and appropriate instructional behaviors.

This objective was attained.

Three project staff members conducted two training days at the School District's computer center for teachers in the pilot secondary reading centers. They also provided on-site training and consultation continuously for the first two months, and for two additional weeks in the spring. Another member was responsible for implementation of the second primary-grade reading center. In weekly exchange visits, the staff member demonstrated operation of the original center, and assisted the teacher in establishing the second center. In this way, continuous support was provided during the implementation year. Two other staff members spent most of the last five weeks of the school year establishing the primary-grade mathematics center.

In all three components, the staff trained participating teachers to operate computer terminals (including sign-in procedures and obtaining instructional programs and various reports). However teachers thought that additional time at the computer center would have enabled them to be more confident with the computer when implementing the pilot program.

Project staff also assisted teachers in organizing the centers to facilitate individualization of instruction. Special emphasis was placed on displaying instructional materials so that pupils could obtain them easily. Systematic storage and coding of instructional materials were also accomplished by the staff. Staff modeled the necessary teacher behaviors in the respective centers on a regular basis, and where needed. Pupil control, an area of continuous concern to the center teachers, was an important aspect of the modeling.

By May, all teachers were observed to have individualized instruction. However, much of the teachers' time was still occupied by classroom management, limiting the amount of tutorial instruction they provided.

SUMMARY AND CONCLUSIONS

The Computer-Managed Instruction project provided the structure and flexibility to overcome difficulties of individualization within a mass-education system.

In its first year since reorganization, the project was partially implemented. By late spring, all components were implemented in the pilot schools and the second primary-grade reading center. However, the regular classroom counterpart of the original primary-grade reading center was disrupted by a succession of substitute teachers, and the other primary-grade reading center and the mathematics center were not fully operational due to funding problems.

The project paritally attained its objectives for the primary-grade reading centers. Although levels of mastery met expectations, project pupils did not exceed comparison groups on a phonics inventory or the CAT-70 Reading subtest. However, they did exceed expected growth for the year as measured by informal reading inventories.

Although data were not available for pupil mastery on the Philadelphia Mathematics Competencies Tests due to a late start in the pilot school, preliminary results on progress tests showed that participating pupils were mastering necessary mathematics skills. Partial attainment of pupil mastery on Reading Competencies Tests indicated a need for thorough examination of the project's on-line component, computer-assisted instruction.

The project provided effective instruction for pupils of all ability levels as shown by the 100% mastery rates on the criterion-referenced tests. The evaluator observed project teachers fully individualizing instruction by May.

The secondary reading component was successfully piloted. However, due to a late start this year, limitations in instructional materials, and difficulties of classroom management without an aide, the mathematics component should be piloted for another year.

COUNSELING SERVICES

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

Each of 14 nonpublic schools is served by a team of counselors for a portion of each week. One member of the team is an educational consultant; the other is a community consultant.

RATIONALE

Many target children fail to achieve their potential in school because their emotional or social problems develop to such an advanced state that adjustment and performance in school are seriously impaired. Individual diagnostic and remedial measures then become necessary to restore the children to an adequate functioning level.

The school and the home must cooperatively foster the children's proper development. With appropriate preventive measures, many of their problems can be alleviated before they become major problems. The Counseling Services project provides remedial and preventive services when needed by the target children, both at school and at home.

EXPECTED OUTCOMES

It is expected that project services will help to prevent the development of chronic emotional, social, or academic disability in target children, and will help to alleviate the children's existing problems.

MODE OF OPERATION

The project works closely with teachers, principals, and parents in providing psychodiagnostic and counseling services in order to alleviate the emotional and/or academic problems which interfere with some target children's adjustment in school. Direct services are provided to these children upon referral by their teacher, principal, or parent.

The CSP teams attempt to share mental health principles and practices (e.g., child development, classroom management) with teachers and parents to enhance the positive development of the children.

PREVIOUS FINDINGS

In 1968-1969, a formative evaluation revealed that the project was established in 14 nonpublic schools. In 1969-1970, questionnaire data suggested that greater community involvement and more effective counseling schedules were needed to meet the many requests for CSP services. In 1970-1971, 80% of the teachers and principals from participating schools felt that children had grown socially as a result of CSP small-group discussions.

In 1971-1972, the CSP teams in every school provided individual testing, counseling, and consulting services for pupils with psychological problems. Small-group discussions, faculty in-service training, and individual teacher consultations were provided for teachers of target grades (K-3) in every CSP school. More than 80% of the participating school personnel who were interviewed expressed satisfaction with the help their children received, and at least 90% expressed a desire for permanent CSP services in their schools.

In 1972-1973, two major changes were made in the project's operation: (a) rather than being restricted to lower elementary grades, the project was made available to all grades in participating schools; (b) rather than providing services on a prescribed basis, the project provided services as requested by individual schools. Most of the staffs had favorable attitudes toward CSP's progress; nearly 100% of those interviewed felt the project was more valuable during 1972-1973 than it had been the previous year.

In 1973-1974, the project provided psychodiagnostic services for more than 350 pupils, subsequent remedial help for more than 325 pupils (more than 50% of whom improved in at least one behavioral factor in which they had previously demonstrated unsatisfactory behavior), and preventive psychological services for 2,000 pupils, 75 teachers, and 400 parents. CSP met all of its stated objectives and was enthusiastically received by pupils, parents, and teachers.

THE 1974-1975 EVALUATION

During the 1974-1975 school year, evaluation again focused on the diagnostic, remedial, and preventive activities of the Counseling Services project.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. Six of the seven CSP teams and one member of the seventh team were assigned to their schools before September. Although the other member of the seventh team was assigned in November as a replacement, this team's accomplishments during the remainder of the year were commensurate with those of the other teams.

This was the first year of the project in one school. Some continuity in staff personnel was maintained in nine of the other 13 schools. Nine of the 15 CSP team members had been assigned to the same schools as last year, and two new members were teamed with one of them.

Team members and student interns were scheduled in schools, aiming for maximal coverage. Scheduling varied from school to school according to the constraints imposed by space limitations, and approval by school principals. Weekly, each school averaged 3.5 days of coverage by at least one CSP staff member and 5.4 person-days of counselor and/or intern time.

The counselors used a variety of affective and motivational techniques. One of the most popular ones, used mainly with younger pupils, was Developing Understanding of Self and Others (DUSO). The DUSO curriculum attempts to develop interpersonal skills in children, using audiovisual aids such as puppets, tape cassettes, pictures, and posters. Taped songs and stories illustrate how the puppets cause and react to a variety of interpersonal situations. The evaluator believed that children participating in DUSO enjoyed the puppets and acting out different roles.

In addition to regular project services, the CSP teams provided a crisis-intervention service. Of approximately 90 incidents which required on-the-spot attention, nearly half arose from a request by a teacher, principal, or parent that counselors investigate the cause of a child's problem such as absence or poor classroom behavior. Also, the counselors settled fights and helped children who came to discuss problems, such as personality conflicts with a teacher, problems at home, or high school placement.

The role of the project's reading-specialist was greatly expanded this year. In previous years, the counselors had difficulty helping children with severe learning disabilities. This year the Diagnostic/Prescriptive Learning Therapy program was instituted, which trained CSP counselors to recommend effective treatments. The reading specialist trained all counselors to use diagnostic instruments, prescribe materials, and implement academic and therapeutic techniques. Many teachers received a summary of the diagnostic and prescriptive findings, and implemented the prescriptive program in their classrooms, helping the child for whom the program was prescribed as well as others with similar difficulties.

ATTAINMENT OF OBJECTIVES

The evaluator made 23 visits to the 14 participating schools and attended two staff-development conferences. Two visits were made to each of eight schools, one lasting two to three hours, the second a full day. Each of the other six schools was visited once for a full day. During the visits, 22 interviews were conducted with the 14 principals, and 180 interviews were conducted with 136 of the 182 teachers. Also, individual interviews were conducted with 387 pupils who had been referred to the CSP teams for help, and with 169 randomly-selected pupils who had participated in group activities in preventive psychological services. Data obtained from these interviews were used to assess attainment of Objectives 1, 2, and 3.

Questionnaires were sent to the parents of 639 pupils who had been referred to the CSP teams and were still in the school in June; 214 (33%) were returned. Data obtained from these questionnaires were used in relation to Objective 2. Questionnaires were also sent to the 14 principals and 182 teachers in CSP schools; 12 principals (86%) and 153 teachers (84%) returned them. Data obtained from these questionnaires were used in treating Objectives 1, 2, and 3.

The evaluator asked CSP personnel to keep (a) a case-record form for each referred pupil, summarizing the type of referral, methods of diagnosis and treatment, and disposition of the case (used in connection with Objectives 1 and 2), and (b) an activity log book summarizing the kinds of preventive psychological activities conducted in each classroom, and the number of pupils, parents, and teachers who participated in the activity (used for Objective 3).

Objective 1: To provide psychodiagnosis of emotional, social, and academic problems. It is anticipated that at least 350 pupils will receive psychodiagnostic services.

This objective was fully attained; 695 children received psychodiagnostic services during the school year.

Individual case records compiled by CSP personnel revealed that pupils were referred to the CSP staff because of behavioral problems (439), academic problems (237), physical problems (15), and other problems (152). (Many were referred for more than one kind of problem.) The number of pupils receiving each type of psychodiagnostic service is shown in Table 1.

During April and May 1975, the cases of 330 referred pupils were discussed by the evaluator with the pupils' respective classroom teachers. Teachers' ratings of the effectiveness of CSP psychodiagnostic services are summarized in Table 2. Most teachers rated CSP psychodiagnostic services favorably. Teachers completing the questionnaire estimated that 722 pupils (rather than the actual 695) had received psychodiagnostic services. This overestimation probably reflected informal or unrecorded contacts by CSP personnel.

Objective 2: To provide remedial help in overcoming emotional, social, and academic problems. It is anticipated that at least 325 pupils will receive individual remedial help.

This objective was fully attained; 622 children received remedial help during the school year.

Pupils' case records compiled by CSP personnel revealed that pupils received help with behavior problems (398), academic problems (213), physical problems (15), and other problems (135). (Numbers include pupils referred for multiple problems.) The number of pupils receiving each type of remedial help is shown in Table 3.

The cases of 295 referred pupils were discussed by the evaluator with the pupils' respective teachers. Teachers' ratings of the effectiveness of CSP remedial services are summarized in Table 4. Most teachers rated CSP remedial help favorably.

During April and May 1975, the evaluator interviewed 387 pupils who had been referred to CSP teams. Of these pupils, 95% knew who the counselors were, 94% said they did things with them, 93% reported that they liked doing things with them, 85% felt the counselors helped them get along with other children, 84% felt the counselors helped them do better in school, and 58% thought the counselors helped their teachers. The number of referred pupils interviewed in each grade is shown in the middle column of Table 5.

Of the 214 parents who returned questionnaires, 92% responded that they knew their children had contact with at least one counselor, and 72% felt that their children had been helped. Seventy-eight percent of the parents reported that they were satisfied with the counselors' work, and 28% suggested services they would like the counselors to perform in the future.

The end-of-year disposition of the referred pupils' cases is summarized in Table 6.

Objective 3: To provide preventive psychological services to pupils, teachers, and parents. It is anticipated that at least 2,000 pupils, 75 teachers (approximately 50% of the total school faculties), and 400 parents will receive preventive psychological services.

This objective was fully attained. Statistical records compiled by CSP personnel revealed that as of May 10, 1975, more than 3,300 pupils, 145 teachers, and 1,000 parents received preventive psychological services.

A sampling of the preventive psychological services that were provided to pupils is shown in Table 7. Services to parents included discussions and parent education. Services to teachers included films and discussions. According to 153 teachers responding to a questionnaire, the most beneficial preventive psychological services were small-group and classroom discussions, classroom consultations, presentations at faculty meetings, student tutoring activities, and educational filmstrips.

During April and May 1975, the evaluator interviewed 169 pupils who were in classes participating in group activities. Of these pupils, 99% knew who the counselors were, 98% said they did things with them, 95% reported that they liked doing things with the counselors, 88% felt the counselors helped them get along with other children, 78% felt the counselors helped them do better in school, and 66% thought the counselors helped their teachers. The number of group participants interviewed in each grade is shown in the last column of Table 5.

SUMMARY AND CONCLUSIONS

The Counseling Services project was fully implemented in 14 nonpublic elementary schools. It provided a variety of psychological and educational services, prevented the development of emotional, social, and academic problems, and provided psychodiagnostic, remedial, casework, and counseling services. The project also shared mental health principles and practices with teachers and parents.

In 1974-1975, the CSP staff provided services to 84% more individually-referred pupils than last year, and nearly doubled the numbers stated in project objectives. Despite this year's greatly increased caseload, CSP personnel continued providing high quality services. An additional program, initiated by the project's reading specialist, trained CSP counselors to identify and aid children with learning disabilities.

CSP services were available to all grades in the participating schools and were provided upon teacher request. The evaluator noted that the CSP teams have functioned most effectively in those schools where there was open and easy communication between them and school personnel, particularly principals.

TABLE 1

NUMBER OF REFERRED PUPILS RECEIVING CSP PSYCHODIAGNOSTIC SERVICES

Type of Psychodiagnostic Service	Reason for Referral*			
	Behavioral (N=439)	Academic (N=237)	Physical (N=15)	Other (N=152)
Psychological Evaluation (N = 129)	55	81	1	28
Classroom Observation (N = 165)	140	59	2	20
Pupil Interview (N = 401)	266	136	13	75
Educator Interview (N = 542)	353	193	14	103
Parent Interview (N = 409)	274	155	11	62
Professional Consultation:				
Outside Agency (N = 114)	66	50	6	23
Reading Specialist (N=50)	20	38	1	2
Psychiatrist/ Physician/Nurse (N = 33)	25	9	2	3
Project Supervisor (N=104)	74	37	3	16
Social Worker (N=36)	25	5	1	14

*Totals are greater than the number of referred pupils because many pupils were referred for more than one type of problem, and many received more than one type of psychodiagnosis.

This table indicates only the number of pupils receiving these services at least once. It gives no indication of the number of times the pupils received each service.

TABLE 2

ESTIMATES BY TEACHERS OF THE EFFECTIVENESS OF CSP PSYCHODIAGNOSTIC SERVICES FOR PUPILS

Rating	Source of Rating	
	Questionnaire* (For 722 pupils perceived by teachers as receiving services)	Interview (For 296 of the named referred pupils for whom teachers gave a rating)
Excellent/Very Good	323 (45%)	140 (47%)
Good	229 (32%)	109 (37%)
Fair	78 (11%)	11 (4%)
Poor	14 (1%)	2 (1%)
Don't Know/Too Soon to Tell/Not Applicable/Omitted Response	78 (11%)	34 (11%)

*The numbers cited by the teachers exceed the total case load of pupils actually recorded by the CSP staff. These numbers, then, reflect the perceptions of the teachers regarding the effectiveness of the services received.

TABLE 3

NUMBER OF REFERRED PUPILS RECEIVING CSP REMEDIAL SERVICES

Type of Remedial Service	Reason For Referral*			
	Behavioral (N=398)	Academic (N=213)	Physical (N=15)	Other (N=135)
Pupil Group Counseling (N = 271)	192	65	5	63
Pupil Individual Counseling (N = 312)	229	115	12	47
Family Counseling (N = 181)	111	80	5	31
Referred to Outside Agency (N = 98)	60	17	6	14
Receiving Educational Remedial Help (N = 91)	33	70	0	9
Teacher Consultation (N = 399)	216	120	5	55
Classroom Observation (N = 103)	89	40	2	11

*Totals are greater than the number of referred pupils because many pupils were referred for more than one type of problem, and many received more than one type of remedial help.

This table indicates only the number of pupils receiving these services at least once. It gives no indication of the number of times the pupils received each service. Many pupils received remedial services many times, often over extended periods of time. This degree of "intensity" of service is not reflected here.

* * *

TABLE 4

ESTIMATES BY TEACHERS OF THE EFFECTIVENESS OF CSP REMEDIAL SERVICES FOR PUPILS

Rating	Source of Rating	
	Questionnaire* (For 440 pupils perceived by teachers as receiving services)	Interview (For 291 of the named referred pupils for whom teachers gave a rating)
Excellent/Very Good	202 (46%)	126 (43%)
Good	134 (31%)	125 (43%)
Fair	55 (12%)	12 (4%)
Poor	6 (1%)	3 (1%)
Don't Know/Too Soon to Tell/Not Applicable/ Omitted Response	43 (10%)	25 (9%)

*The numbers cited by the teachers exceed the total case load of pupils actually recorded by the CSP staff. These numbers, then, reflect the perceptions of teachers regarding the effectiveness of the services received.

TABLE 5

NUMBER OF CSP PUPILS INDIVIDUALLY INTERVIEWED BY EVALUATOR

Grade	Referred Pupils (N=387)	Randomly Selected Pupils Who Participated in Preventive Group Activities (N=169)
K	15	14
1	61	18
2	36	18
3	37	9
4	71	15
5	40	16
6	44	12
7	27	36
8	56	31

TABLE 6

END-OF-YEAR CASE DISPOSITION FOR CSP REFERRED PUPILS

Disposition of Cases	Reason for Referral*			
	Behavioral (N=439)	Academic (N=237)	Physical (N=15)	Other (N=152)
Treatment in Progress (N = 338)	203	141	6	75
Case Closed (Improved) (N = 234)	178	62	6	27
Case Closed (Other Reasons) (N = 117)	53	30	3	50
Disposition Not Documented (N = 8)	5	4	0	0

*Numbers add to more than total because many pupils were referred for more than one type of problem.

TABLE 7

APPROXIMATE NUMBER OF PUPILS AND NUMBER OF SCHOOLS IN WHICH THOSE PUPILS RECEIVED PREVENTIVE PSYCHOLOGICAL SERVICES

(3,366 Pupils)

Number of Schools	Approximate Number of Pupils*	Type of Preventive Service
13	1,393	Classroom discussions and counseling (e.g., affective education)
11	1,953	Classroom activities for self-awareness and understanding
10	574	Developing Understanding of Self and Others (DUSO, a puppet "game")
8	318	Career and educational guidance activities
7	626	Parent/child orientation to school
6	198	CSP-directed student projects
3	111	Counseling hour for nonreferred students
2	24	Tutoring of younger pupils by older pupils
1	30	Videotaping of pupils to help them evaluate their own behavior

*Numbers add to more than total because many pupils received more than one preventive psychological service.

This table indicates only the approximate number of pupils receiving these services at least once. It gives no indication of the number of times these pupils received each service. Many pupils received preventive psychological services many times over extended periods of time. The degree of "intensity" of service is not reflected here.

CREATIVE DRAMATICS

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

Creative Dramatics is a staff-development project providing experiences and training which enable participants to become more effective teachers.

RATIONALE

There is a need to develop the teachers' abilities to facilitate the pupils' creativity and motivation so that pupils can more easily master their academic subjects. The project has been designed to meet this need. CD is improvised drama. Pupils of CD-trained teachers have their interest stimulated through presentation of stories and poems, and through planning, acting, and evaluating the activities. This stimulation is especially important for target-area children who find school neither relevant nor necessary.

EXPECTED OUTCOMES

It is expected that target children will overcome language and social problems through the teachers' effective use of CD techniques.

Since CD in the classroom requires direct pupil participation, target children should increase their vocabularies and strengthen their self-confidence and self-awareness.

It is also expected that the children will show greater interest in books, use the library more often, show more confidence in expressing ideas, show an enhanced self-image, develop their creativity, show greater appreciation of the arts, and show greater interest in their own culture and other cultures.

MODE OF OPERATION

The major thrust of the project is staff development for elementary-school personnel in the use of creative dramatics as a teaching tool in the cognitive and affective areas.

The techniques may be used by the teacher during any part of the school day as an addition to the regular instructional format. Through dramatization, role-playing, and improvisation, each child is encouraged to use imagination in solving problems, to communicate through body movement, and to engage in self-expression. Pupils are directed to gain background information for their activities through research in related literature. Story-telling and reading assignments, related to the pupils' own sense of the dramatic, are encouraged.

During the school year, four staff-development meetings are held for teachers already trained in creative dramatics; monthly supervision is afforded to teachers who are still being trained.

Leadership meetings are held to insure the project's growth. Experienced teachers (a) assume responsibility for planning meetings, (b) help set policy, and (c) act as resource persons in their own schools. These teachers are from various disciplines in the school system. They are in training or have been trained to lead a 13-week workshop to present the Creative Dramatics project at faculty meetings, or to act as resource persons in their own fields.

The project offers 13-week staff-development workshops sponsored by various districts for new personnel including teachers, aides, counselors, speech therapists, special-education personnel, librarians, and reading teachers. In addition, one-shot CD workshops are made available at meetings of general faculty, reading teachers, principals, parents, and other groups for dissemination of project activities.

A CD Handbook, developed by the project office and including contributions from previous workshop trainees, is distributed as a guide to all who participate in the ongoing workshops.

PREVIOUS FINDINGS

Evaluations prior to 1973-1974 revealed that pupils in CD classes made higher-level, longer, more spontaneous contributions to their classes than pupils in comparison classes. Teachers in the project lectured less often and for shorter periods of time, and encouraged pupils to express themselves and participate in classroom activities more than did comparison teachers. Fifth-grade participants obtained significantly higher scores ($p<.10$) than matched control groups on the Vocabulary subtest of the Iowa Tests of Basic Skills; however, no significant differences were found between sixth-grade CD classes and control classes on the same subtest.

Since the project's initiation, teachers trained in CD techniques have tended to incorporate those techniques into their teaching behaviors. Participating teachers have consistently expressed their support of CD ideas, techniques, activities, and materials.

THE 1974-1975 EVALUATION

The current evaluation of the Creative Dramatics project examined the extent to which classroom teachers trained in CD techniques were using them in their classrooms. The workshop phase of the project was evaluated through a questionnaire given to the workshop participants.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. A primary function of the project was to provide staff development in Creative Dramatics techniques. The CD staff conducted workshops and demonstration lessons for school faculties, staff specialty groups, classroom aides, parent groups, student teachers, and librarians. The project supervisor and CD specialists provided after-school and night meetings for continuing staff and the leadership committee, and held four districtwide workshops. Attendance at all workshops was voluntary. A summary of CD workshops is given in Table 1.

The evaluator observed 13 of the 15 scheduled sessions during one of the four districtwide workshops. Innovative techniques for teaching mathematics, science, reading, language arts, drama, and self-expression were presented. Techniques were also demonstrated for special subject areas, traditional and open classrooms, and retarded and handicapped children. Workshop participants were encouraged to discuss their classroom experiences with CD techniques. Although sessions sometimes lasted after the scheduled time, the workshop leader was always available to listen and make suggestions. Useful CD materials were distributed to workshop participants.

CD workshop leaders conducted demonstrations and observations in participants' classrooms once a month. The CD Handbook, developed by the project office and distributed to workshop participants, was used by classroom teachers and librarians to develop CD lessons.

Fifty-eight (86%) of 67 workshop participants responded to a questionnaire at the conclusion of the series. They stated that the workshops had beneficial effects on both themselves and their students. The most useful activities learned in workshops were story dramatization, sense memory, language-arts games, improvisations in pantomime, and techniques dealing with emotions. The questionnaire also revealed that 53 (79%) of the participants used CD techniques on a regular basis.

Observations revealed that these activities were used in the classrooms. In the majority of the 57 observations of both regular and special classes, pupils participated knowledgeably in the CD activities presented by their teacher. The evaluator also observed a high level of competence in many of the CD teachers, including those in their first year of training.

ATTAINMENT OF OBJECTIVES

Objective 1: To train teachers to use creative dramatics techniques in their classrooms so that they will be observed (a) beginning with nonverbal communication stressing children's senses, (b) encouraging children to explore emotions and feelings, (c) encouraging children to portray different characters, (d) introducing dialogue and encouraging imagination and concentration, (e) introducing story dramatization, and (f) simultaneously encouraging the development of creative writing.

This objective was attained.

The objective was considered attained if the observed CD-trained persons would employ at least one of the six cited techniques in any lesson during the year. Fifty-seven observations were made of self-contained, open, and special education classrooms where CD lessons were presented by the regular teacher, school creative-expression teacher, creative dramatics specialist, or librarian. Each observation lasted for approximately 40 minutes, during which the evaluator recorded and classified the observed CD techniques.

From October to June, observations of regular and special education classes revealed, in all visited classes except one, the sequential execution of all CD techniques taught in the workshops and refined under monthly supervision by the CD staff. The majority of lessons (37) began with nonverbal communication stressing children's senses. Repeated practice of basic techniques appeared to strengthen the foundation for the techniques which were to follow. Other frequently observed techniques were encouraging children to portray different characters (12 times), and introducing story dramatizations (10 times). The evaluator received and reviewed numerous samples of creative writing which she had observed being encouraged by the CD teachers. Although all six techniques were observed, pupils' experience with CD and the CD-trained person's mastery seemed to determine the level at which each technique was used.

Objective 2: In academic areas when the teacher employs CD techniques, children will express their ideas through verbalization or pantomime more frequently as the year progresses.

This objective was attained.

The evaluator made 57 visits from October to June. No CD techniques in academic areas were observed in October or November. By the end of the year, however, the evaluator observed verbalization and/or pantomime to express academic ideas in science (twice), social studies (three times), and language arts (19 times).

Pupils' experiences with CD and the CD-trained person's mastery of techniques seemed to determine the frequency of CD integration into the academic areas.

SUMMARY AND CONCLUSIONS

The Creative Dramatics project seeks to develop teachers' abilities to stimulate creativity, so that pupils can more easily master their academic subjects. CD stimulation is especially important for Title I children who find school neither relevant nor necessary.

The current evaluation examined the extent to which CD-trained teachers and others used these techniques with their students. The workshop component of the project was evaluated through a postworkshop questionnaire.

The project's intended mode of operation was fully implemented. The CD staff provided various in-service workshops, staff development for previously-trained persons, and regular visits to classrooms for demonstration and refinement of CD techniques.

Both project objectives were fully attained. Observations revealed that CD-trained personnel successfully presented various techniques sequentially to their pupils. Also, children expressed academic ideas through verbalization or pantomime more frequently as the year progressed, particularly in the language-arts area.

Postworkshop questionnaires indicated that the project provided instructional techniques which helped participants to better understand and deal with their pupils. Workshops were well planned and executed, and distributed materials, especially the CD Handbook, were considered a valuable source of CD ideas.

Enthusiasm expressed by respondents on the questionnaire, and the observed competence of many first-year project participants, were interpreted as evidence that CD training was effective.

TABLE 1

SUMMARY OF CREATIVE DRAMATICS WORKSHOPS REPORTED BY PROJECT ADMINISTRATOR

Staff-Development Activity	Number of Events	Number of Staff Members Involved
1. Thirteen-to-15-Week Workshops	4	76
2. Continuing Staff Development (Evening Workshops)	2	93
3. "One-shot" Workshops for Staffs of Individual Schools	4	172
4. "One-shot" Workshops for Staff Specialty Groups	21	783
5. Leadership Staff-Development Workshops	5	15
6. "One-shot" Workshops for Parents	3	38

EDUCATION IN WORLD AFFAIRS

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

Education in World Affairs is a project that promotes knowledge and understanding of current world affairs and of the characteristics of various countries of interest. Guest speakers, trips, materials, and conferences are provided for students in Grade 6 and in junior and senior high school.

RATIONALE

Children should have the opportunity to acquire understandings of the world which go beyond family and local events. Target children have few opportunities to meet people from other nations and learn firsthand of their history, culture, and mores. Although books, booklets, and visual materials are used, the project emphasizes a direct, personal learning approach involving classroom visitations by foreign students, structured visits to cultural or historical centers, and carefully planned conferences which allow the children to meet and discuss issues of interest. Thus the project offers educational experiences not normally available in the regular classroom program of most inner-city schools.

EXPECTED OUTCOMES

It is expected that meetings with foreign students, visits to sites of interest, and discussions with peers will encourage curiosity, stimulate new interests, inculcate new knowledge, and build respect for other cultures and races. Students should learn about other people: what life is like in other countries, how food and dress relate to climate and customs, and how the lives and problems of people the world over are similar.

MODE OF OPERATION

The project's elementary school component concentrates on the study of four countries and a unifying study called "One World." Teacher sponsors who volunteer to work in the project receive training from an elementary school liaison teacher who assists the sponsors and coordinates activities. Booklets for each child, along with reference books, charts, and filmstrips are distributed to each class prior to the unit activities. At the completion of two units, participating classes meet and make presentations at one of the district schools. Planned experiences at cultural centers are scheduled, and guest speakers from foreign countries are invited to interact with classes at the schools.

The junior high school component concentrates on the study of four countries. Volunteer teacher sponsors conduct lessons either as part of a class session or as a club activity. Booklets, books, filmstrips, charts, and maps are sent to each sponsor prior to unit initiation. A junior high school liaison teacher coordinates the various schools' activities, trips, and classroom visitations by guest speakers. At the end of the school year, the schools participate in a World Fair of cultural presentations, displays, and projects.

The senior high school component concentrates on the study of topics of international interest and concern. Guest speakers address the students at seminars held during the week and at forums conducted on Saturdays. Question and answer sessions are scheduled. Students are provided an opportunity to share ideas with peers from other ethnic backgrounds. A senior high school liaison teacher helps to plan and organize the various meetings and trips, and consults with teachers.

A special-education component, similar to the elementary school component, services eight classes of retarded children. The children study two countries, attend a cultural event, and go on a planned trip. A conference for parents, sponsors, and project personnel is held to introduce the elements of this project to the parents.

PREVIOUS FINDINGS

From 1966 through 1970, project students demonstrated significantly greater knowledge of the countries studied than students who were not in the project. A device used to compare the open-mindedness of project students with that of other students indicated no significant differences.

Monitoring in 1970-1971 through 1971-1972 indicated that project-produced materials were utilized by teachers and that trips were conducted as scheduled.

In 1972-1973, teachers expressed satisfaction with the success of the pilot six-week special-education component involving nine classes of retarded children.

In 1973-1974, test results indicated that junior high school students made statistically significant gains in knowledge of information contained in the specially prepared unit booklets.

THE 1974-1975 EVALUATION

The current evaluation of the Education in World Affairs project was designed primarily to monitor the activities and the functions of the project. In cooperation with project personnel, the evaluation team developed (a) two tests to measure the amount of information the students learned about two of the countries studied, and (b) an instrument to assess students' cultural attitudes.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. EWA provided an effectively coordinated program for 35 upper elementary, 31 junior high, 15 senior high, and eight special education classes in 75 public and 10 nonpublic schools. Although the project focused primarily on Grades 6, 7, 11, and the educable retarded, other grades also were served.

The EWA staff--the project director, and separate elementary, junior high, and senior high/special education liaison teachers--coordinated all project activities. The staff worked together to organize special programs, forums, and trips, and prepared and disseminated books and supplemental materials. All teachers who volunteered to act as project sponsors in their schools received these materials and services.

Elementary and junior high students were taught four units and special education groups were taught three, each based on individual countries and the "One World" concept. Senior high groups studied six prominent news topics. For each country studied in 1974-1975, a booklet was specially prepared by EWA, including information on the history, culture, geography, and customs of that country. Photographs, illustrations, maps, art reproductions, poetry, games, and puzzles were interspersed throughout the text to add clarity and interest to the material.

The special education classes studied "One World," Ghana, and Puerto Rico, using booklets revised for their level and needs. For each unit, teachers received books for the classroom library, records, films or filmstrips, maps, and posters to enhance classroom presentations. The liaison teacher was available to classroom teachers and provided ideas for each unit and follow-up activities.

Trips to cultural centers were arranged to supplement the units, and lecturers geared their programs to the special education audience. Parents, teachers, and district administrators attended the special-education culminating program at the Civic Center at the end of the school year. Awards were given to all participating groups and selected students. After students' presentations a catered dinner was provided for all in attendance.

The elementary school program concentrated on three countries--Italy, Puerto Rico, and Ghana. An additional unit, "One World," focused on the common needs and interests of mankind, and the commonality of all social systems. Speakers visited classrooms during three of the four units and talked about their countries. Trips to various cultural sites were made during three of the four units, and the EWA staff arranged specially-prepared programs and lectures at each site.

At the conclusion of every two units studied, a culminating program was held at one participating school in each district. Students from all district EWA elementary classes performed for one another songs, dances, and skits learned when they studied the countries. Children's presentations displayed planning and variety. The EWA staff arranged a tour of the United Nations and other places of interest in New York City for every elementary class. The elementary liaison teacher visited classrooms and served as a resource person for participating teachers.

The junior high program covered four units--Ghana, Brazil, the Soviet Union, and China. Each student received a new, specially prepared booklet for each country that included geographical, historical, social, and cultural information. Enrichment materials selected by the EWA staff, including books, pictures, filmstrips, and maps, were delivered to each school. Programs on each country were presented to participating junior high classes at cultural centers in Philadelphia--Ile-Ife Museum (Ghana), Philadelphia Zoo (Brazil), International House (Soviet Union), and Philadelphia Museum of Art (China). A United Nations tour was provided for 35 students from each participating school. The junior high liaison teacher suggested speakers, arranged for film rentals, and assisted school sponsors.

The senior high program focused on world issues of current importance. Students received subscriptions to news periodicals, heard in-class speakers lecture on issues studied, took trips, and attended various forums and seminars. A model United Nations was planned, organized, and conducted by students and guided by EWA staff.

ATTAINMENT OF OBJECTIVES

Objective 1: To broaden the cultural attitudes of all participants.

This objective was not attained.

A locally-developed cultural attitudes test was given to 281 EWA participants and 195 comparison students. The test used a semantic differential scale and 20 slides, which were carefully selected for cultural impact. As each slide was presented, students were told to choose one word in each of five word-pairs. After responding to each slide, students joined in a brief evaluator-led discussion. The teacher and another evaluator listened to the discussion on each slide and separately rated the group on a seven-point rejection/acceptance scale.

Analysis of the students' responses, shown in Table 1, revealed no significant difference between EWA and comparison groups on any slide-portrayed concept. Analysis of the teachers' responses also revealed no significant difference between the two groups. The project's failure to attain this objective may be partially due to difficulties in measuring attitude change over a short time period.

Objective 2: For students in Grades 6 and 7 and for those on the Special Education level, to increase their specific knowledge and understanding of various countries through selected reading materials, films and records, in-school speakers, UN trips, and programs in Philadelphia cultural centers.

This objective was attained.

Observational visits, interviews, and a teacher questionnaire indicated that books, filmstrips, speakers, and trips were provided as scheduled.

One third of the elementary and junior high EWA students were given a locally-developed pretest and posttest on one unit (Ghana in Grade 6, Brazil in Grade 7). The tests were based on information in their unit booklets.

Analysis of results, using a t test, indicated statistically significant improvement for both groups. Data are displayed in Table 2.

Objective 3: For students on the senior high school level, to increase their specific knowledge about various international issues of a timely nature through special reading materials, in-school speakers, seminars, forums, and trips to the United Nations and Washington, D.C.

This objective was attained.

Observations, interviews, and teacher questionnaires revealed that senior high students studied six prominent issues in the news. They attended three all-day seminars and three Saturday morning forums that dealt with current international topics such as Palestine, inflation and recession, the CIA, and survival in today's world. Several speakers with different backgrounds and viewpoints made presentations at each meeting. Students could question speakers directly and then discuss the issues with peers in small groups, each group being limited to five students from any one school. An average of 200 students attended each forum.

Every EWA class toured the United Nations Headquarters, and three students from each class visited the State Department and two embassies in Washington, D.C. Each senior high EWA student received half-year subscriptions to Time and Newsweek magazines.

Through tryouts and briefings, high school students were selected to plan, organize, and conduct a model United Nations, aided by EWA personnel. Eighty-five nations were represented by delegates from 59 high schools. The all-day meeting included two plenary sessions and five meetings of General Assembly committees. Since the students had to present actual viewpoints of the country they represented (not their personal views), a great deal of research and preparation was necessary. Local news-media coverage of the session added to the enthusiasm of the participants.

Objective 4: To improve participating students' knowledge of world geography with special focus on the countries studied.

This objective was attained.

A geography subtest was included as part of the tests used for Objective 2. In 15 of the 16 classes tested, there was a pretest-to-posttest increase in the number of students achieving geography mastery.

Objective 5: To provide participating teachers with the knowledge and skills needed to deal with project materials and pupils' cultural attitudes. This will be accomplished via workshops and teacher seminars.

This objective was attained.

Materials chosen as teaching aids were included in a package sent to each class for every unit. At the beginning of the school year, participating teachers reviewed new materials with their project liaison person at a workshop. Liaison persons kept in contact with EWA teachers, and were available for assistance.

Each level held a dinner meeting during the year, where teachers and project personnel exchanged ideas. Teachers were encouraged to evaluate different aspects of the program and make recommendations for next year. A guest speaker at a junior high teachers' meeting provided valuable information.

SUMMARY AND CONCLUSIONS

The Education in World Affairs project originated as a public school extension of the World Affairs Council, to give inner-city students an opportunity to gain factual knowledge about different cultures through first-hand experiences. To promote open-mindedness toward other cultures' values and customs, a carefully planned program was developed including materials and field experiences.

The project's intended mode of operation was fully implemented. Constant support was given to teachers in classrooms and in consultations by the EWA staff. Planning sessions and conferences were conducted to keep teachers informed of available materials for teaching about various cultures represented in the Philadelphia area. Books and materials furnished to the elementary and junior high classes were prepared and selected to reinforce and enrich reading, language, and geography skills. High school students were provided with periodicals, briefings, and lectures. Programs for special education students were structured to broaden awareness of the world's diverse cultures. Trips to museums and other cultural centers exposed students to countries' history and artifacts. Exchange students and knowledgeable travelers gave lectures, often with their own slides, and answered questions, providing EWA students with a firsthand, modern view of life in other places.

Observations, informal interviews, and a midyear teacher questionnaire revealed that trips were taken, materials were received, and speakers arrived in classrooms and at special events as planned. Teachers' comments expressed enthusiasm.

Four of the five objectives were attained. Students in Grades 6 and 7 displayed pretest-to-posttest growth both in geography knowledge and in understanding of countries studied through EWA booklets. Senior high school students increased their knowledge of current issues by trips, model United Nations sessions, and project materials. Teachers attained their objective of acquiring EWA instruction skills. However, when compared with a nonparticipating group, EWA students did not exhibit significantly different cultural attitudes, possibly because of problems inherent in the measurement of attitude change over a short time period.

The evaluator found that the project motivated basic reading skills, and developed an understanding of the geography, culture, and history of other lands. In addition, carefully prepared and selected EWA materials and events provided the needed ingredients for manageable six-week units in social studies.

(For conservation of paper, Table 1 follows Table 2.)

TABLE 2

PERFORMANCE ON EWA UNIT TESTS

Group	Unit	Pretest		Posttest		Gain
		Number Tested	Mean Score	Number Tested	Mean Score	
Grade 6	Ghana	241	8.5	243	13.5	5.0*
Grade 7	Brazil	155	13.0	143	16.9	3.9*

*Statistically significant (t test) at the .15 level.

TABLE 1

MEAN SCORES ON STUDENT RESPONSE FORM FOR SLIDE TEST MEASURING CULTURAL ATTITUDES

Slide Number	EWA Students (N=281)	Comparison Students (N=195)	Difference (EWA minus Comparison)*
1	1.74	1.64	+ 0.10
2	4.35	4.39	- 0.04
3	2.78	2.55	+ 0.23
4	2.41	2.14	+ 0.27
5	2.66	2.42	+ 0.24
6	3.87	3.64	+ 0.23
7	4.56	4.39	+ 0.17
8	2.83	2.85	- 0.02
9	3.49	3.51	- 0.02
10	2.34	2.35	- 0.01
11	1.71	1.52	+ 0.19
12	1.98	1.81	+ 0.17
13	2.06	1.99	+ 0.07
14	2.46	2.61	- 0.15
15	3.10	2.67	+ 0.43
16	3.63	3.61	+ 0.02
17	2.89	2.82	+ 0.07
18	3.02	2.79	+ 0.23
19	2.66	2.30	+ 0.36
20	1.82	1.79	+ 0.03
All Slides	2.82	2.69	+ 0.13

*None of the differences was statistically significant at the .05 level.

(For conservation of paper, Table 2 precedes Table 1.)

ENGLISH AS A SECOND LANGUAGE--READINESS

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

The ESL Readiness project is designed to provide Spanish-speaking children with kindergarten experiences structured to develop English language competency and readiness skills.

RATIONALE

The primary assumption of the project is that many first-grade Spanish-speaking children in target schools are low achievers because of poor English facility, a lack of the necessary readiness skills, and the attendant effects of poverty. Low achievement frequently continues throughout the school career of the Spanish-speaking child. The project seeks to avoid this long-term handicap by serving Spanish-speaking children while they are in kindergarten.

EXPECTED OUTCOMES

As a result of project participation, the pupils are expected to develop essential readiness and English-language skills which will enable them to succeed in first grade and, consequently, in their entire school careers.

MODE OF OPERATION

A project center is located in each of six schools which have a high percentage of Spanish-speaking pupils. Each center is staffed by one teacher who is assisted by two bilingual parent aides (parents of participating children). The teachers are trained to work with language-development programs (e.g., Distar, Let's Learn Language, Michigan Language Program) having a proven high degree of success in developing requisite skills in bilingual children. Teachers are trained also to emphasize the inquiry methods and to stimulate language development.

Classes meet for either half-day or full-day sessions in an informal classroom setting. Project children receive instruction in English language and readiness skills at least three hours per day. The teachers use both English and Spanish as instructional languages. The amount of English used increases during the school year. Funds are available for visits to local institutions (e.g., Franklin Institute, Art Museum) and for other vocabulary- and concept-development experiences.

PREVIOUS FINDINGS

Previous evaluations consistently indicated that the project was partially successful in meeting its goals of developing English language competency and readiness skills. Approximately 60% of the pupils attained mastery scores (24 or more correct) on the Philadelphia Readiness Test, which is indicative of readiness for first grade. Students also showed statistically significant gains ($p < .05$) from pretest to posttest on the Elementary School Speaking Test in English and Spanish.

THE 1974-1975 EVALUATION

This year's evaluation of the ESL Readiness project focused on the degree to which the pupils developed their readiness skills (measured by the Stanford Early School Achievement Test) and the degree to which they improved their English language skills (measured by the English subtest of the Elementary School Speaking Test in English and Spanish).

IMPLEMENTATION

The project's intended mode of operation was fully implemented. The evaluation team's observations and interviews with ESL Readiness teachers at the beginning and end of the school year indicated that the project's operation was similar to that of previous years.

ESL Readiness centers were located in six schools with a high population of Spanish-speaking children. Kindergarten experience was provided for five-year-old Spanish-speaking children. Where space permitted, children under five years of age and/or non-Spanish-speaking children also were admitted. Each center was staffed by a teacher and two bilingual aides. Five centers operated on two half-day shifts; the sixth had one half-day shift.

The ESL Readiness classes generally were divided into small groups for instruction in English language-readiness skills. Teachers used both English and Spanish as instructional languages. The amount of English that was used increased as the year progressed. Informal development of pupils' English language skills was stressed, and pupils also received training in perceptual, motor, and mathematics-readiness skills. Trips and other experiences were used to enrich vocabulary and concept development. The teachers were involved in ongoing staff development, where they were trained to use various readiness programs provided by the project.

A written report was sent to each pupil's parents describing progress in several skill areas. Another copy of the report was retained for school records, to provide diagnostic information for the pupil's first-grade teacher.

At midyear, the Santa Clara Inventory of Developmental Tasks (IDT) was added to the instructional program in five centers. The IDT consists of an Observation Guide which provides guidelines for assessing children's developmental skills, and an Instructional Activities Manual which contains corresponding learning activities for each developmental task. It was used to assess pupil competency in language development, auditory memory and perception, and conceptual development.

ATTAINMENT OF OBJECTIVES

Objective 1: To develop the project children's readiness skills to the extent that 60% of the pupils attain a mastery score of 17 or more correct on the Stanford Early School Achievement Test (SESAT).

The objective was fully attained. The criterion score was applied to Part 4 (Aural Comprehension) of the SESAT. It was the mean score obtained in 1973-1974 by pupils in District 5, in which five of the project's six centers are located.

The test was administered to all five-year-old project pupils in May 1975. At that time 63% of the project's pupils (not just the specified 60%) attained scores of 17 or higher.

In one center, the Letters and Sounds section of the SESAT also was administered. Twenty-eight of the 32 pupils (88%) achieved a score of 12 (the previous year's mean score for District 5) or better. Project pupils' mean score in 1975 was 19, which is at the national 92nd percentile.

An additional study (originally intended as a follow-up) compared the performance of Spanish-surnamed pupils who participated in the project in 1973-1974 with that of Spanish-surnamed pupils who had no formal pre-first-grade school experience. Comparison pupils attended one of the six schools where the project was housed, or a nearby Title I nonpublic school with a significant Spanish-speaking population. October 1974 scores on the Metropolitan Readiness Tests were compared for these two groups.

In October 1974, six of the schools participating in the study administered the Metropolitan Readiness Tests to their first-grade pupils. The tests measure the extent to which school beginners have developed in several skills that contribute to readiness for first grade. Eighty-eight project pupils and twenty-eight comparison pupils were tested. The 88 former project participants had a mean score of 56.5 (54th percentile) with a standard deviation of 19.5. The 28 comparison pupils had a mean score of 48.8 (37th percentile) with a standard deviation of 18.7. A t test indicated that the difference favoring project participants was statistically significant at the .001 level. Thus, results of the Metropolitan Readiness Tests indicated that the skills contributing to readiness for first-grade instruction were more highly developed in project pupils than nonproject pupils.

Objective 2: To improve the project children's English language skills to the extent that there will be a significant gain from pretest to posttest score on the Elementary School Speaking Test in English and Spanish (English subtest).

The objective was fully attained.

The English subtest of the Elementary School Speaking Test was administered to 190 five-year-old project children in September and May. The mean pretest score was 32.7; the mean posttest score was 43.0. A correlated t test revealed that the gain of 10.3 points was statistically significant beyond the .05 level.

SUMMARY AND CONCLUSIONS

The ESL Readiness project was fully implemented according to the intended mode of operation. Both project objectives were fully attained. Pupils made significant improvement in their English language skills as measured by the English subtest of the Elementary School Speaking Test. The project also attained its readiness-skills objective. The specified mastery score of 17 or higher on the Aural Comprehension part of the SESAT was achieved by 63% (more than the expected 60%) of the pupils.

In a follow-up study, Spanish-surnamed pupils who participated in the project during the 1973-1974 school year performed significantly better on the October 1974 Metropolitan Readiness Tests than a comparison group of Spanish-surnamed pupils who had no formal preschool experience.

ENGLISH TO SPEAKERS OF OTHER LANGUAGES

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

The English to Speakers of Other Languages (ESOL) project serves pupils in Grades K-12 who are more proficient in another language than they are in English. Using a staff of bilingual teachers, it emphasizes development of English speaking and listening skills.

RATIONALE

The acquisition of English as a second language has been described by Robert Lado as "acquiring the ability to use its structures within a general vocabulary under essentially the conditions of normal communication among native speakers at conversational speed."

Most of the target pupils in the ESOL project lack basic skills in spoken and written English. Language instruction needs to be provided in a systematic manner because chance contacts with spoken English are usually insufficient for target children to gain needed skills. Bilingual teachers facilitate communication.

EXPECTED OUTCOMES

Pupils served by this project are expected to show marked improvement in speech production and comprehension, and to demonstrate better communicative skills in English when compared with non-ESOL pupils with similar backgrounds. It is expected that pupils will learn the patterns of everyday speech and will develop appropriate skills in reading. These pupils are expected to be able to use and understand English in normal conversational settings when their participation in the project is completed.

MODE OF OPERATION

In elementary schools, the project provides a springboard into reading and writing skills by emphasizing essential structures, idioms, and vocabulary of oral English.

In most schools where the project is implemented, pupils are scheduled to leave regular classrooms and attend the ESOL lesson. Class size, instructional time, materials used, and homogeneity of groups vary among the participating schools. When the lesson is completed, children return to their regular classroom settings.

At some schools, mainly elementary, pupils spend the entire day with ESOL teachers. In these all-day programs many pupils are exposed to their mother tongues. All receive instruction in mathematics, science, and social studies as a part of ESOL.

Facility in the second language is enhanced by drills of idiomatic speech patterns, practice in listening, and memorization of short dialogues. The ESOL project deals with English language and the thought of the speaker, and with the rules for associating the two within the system of idiomatic English. Patterns are learned through use rather than through rules. The ability to associate thought with English expression is presented through direct experience rather than through learning formal grammars or through translation from the native tongue. After pupils become familiar with the spoken language, they are taught reading and writing skills. Visual aids are frequently utilized.

PREVIOUS FINDINGS

Because the ESOL project serves all pupils identified as needing its services, control-group evaluation designs have not been used. In recent years, more rigorous statistical control of extraneous variables increased the probability that improvements in skills were directly related to project impact.

Evaluations since 1966-1967 have revealed improvement in pupils' English-language competencies during the school year. Parents, principals, and both project and homeroom teachers reported that ESOL was successfully meeting its objectives. Surveys and observations by evaluators were corroborated by results of tests. The Linguistic Capacity Index, the Boehm Test of Basic Concepts, and the Stanford Diagnostic Reading Test (Level I) indicated that longer contact with the project was associated with learning more English.

In addition to contact with the project, the following factors were found to be related to the acquisition of English-language skills: (a) pupil's length of time in an English-speaking environment, (b) pupil's adjustment to school, (c) school attended, (d) grade, (e) class size, (f) hours of instruction, and (g) instructional setting. For pupils in all-day, self-contained classrooms, more than 90% of the year's increase in test scores was found to occur in the first half of the year. This was in striking contrast to pupils attending project classes part-time, for whom the increase tended to be distributed evenly throughout the year.

In 1973-1974, grade, years on mainland, length of instruction, text used, and class size were found to be significantly ($p<.05$) related to test scores. When age, grade, or length of time on the mainland was controlled, pupils in the project for more than a year scored better than those with less than a year's contact with the project.

THE 1974-1975 EVALUATION

The current evaluation of the English to Speakers of Other Languages project involved systematic observation of classes and focused on (a) pupil admission procedures, (b) development of a criterion-referenced test of aural comprehension, (c) comparison of the project's different models, and (d) measurement of project impact on aural comprehension skills.

IMPLEMENTATION

The project's intended mode of operation was implemented. Varied ESOL models were initiated according to schools' needs and site limitations.

This year, the project staff formalized procedures for classifying pupils. A screening test was developed and administered to more than 4,700 pupils in Title I schools. By October, most schools had completed the first series of screening tests, administered to pupils on roll at the start of the school year. Pupils who arrived later were also screened, and all records were entered in a computerized file which was updated periodically.

Of the 6,109 pupils who were screened and entered in the file by March, 4,092 were in public schools eligible for Title I funds and 677 were in nonpublic eligible schools. Approximately 1,800 pupils in the file were placed in ESOL classes. There were 54 ESOL teachers who taught an average of 32 pupils. Decisions on the placement data and levels of ESOL instruction assigned to the different age groups are shown in Table 1. The proportion of children identified as needing ESOL decreased steadily up to entry into high school. In high schools, however, there was a sharp increase in the percentage of screened pupils in need of ESOL. At present there is no explanation for the increase.

In addition to the students who were screened, approximately 1,700 pupils were receiving ESOL instruction in Title I schools under the Let's Be Amigos or Bilingual Right to Read programs. Information about these pupils can be found in reports of evaluations of these programs.

English-dominant pupils (those who demonstrated facility with English, and whose competence in English was greater than in another language) tended not to be assigned to ESOL classes after screening, as shown in Table 2. Pupils who were dominant in English as well as their native language tended to need less instruction than those who were monolingual.

Evaluators made 47 observations of ESOL--six of the screening process, 15 of the administration of a curriculum-based aural comprehension test, and 26 of classroom instruction. Evaluators also interviewed project administrators. Through interviews and observations, the evaluators noted wide variation in the language groups served, length of instruction, class size, and teachers' use of the pupils' mother tongue. Although the majority of the target population was Spanish-speaking, 7% of the non-English-dominant pupils spoke other languages, most commonly Korean, Portuguese, Italian, or Greek.

Evaluators observed 21 different classes in 26 visits. Teachers reported that of the 259 pupils in those classes, 48% received more than 150 minutes of daily ESOL instruction, 21% received more than 90 minutes, and 31% received up to 90 minutes of instruction.

Of the 133 pupils who had 150 minutes of ESOL or less, 35 received some instruction in their mother language. Thus, approximately 62% of the pupils received either bilingual instruction or more than 150 minutes daily of ESOL instruction.

The 98 pupils who received 150 minutes or less of ESOL and no bilingual instruction were in classes whose average enrollment was less than 10 pupils. The average size of all 21 observed classes was 12 pupils. Thus, ESOL classes tended to be smaller than regular classes, and allowed intensive instruction and attention to the language difficulties of individual pupils.

A sample of 15 teachers working in 10 schools was selected to evaluate the Test of Aural Comprehension. This sample represented varied classroom characteristics and pupils of diverse backgrounds in Grades 3-12. These teachers indicated that of the 276 pupils, 28 had been promoted out of ESOL and returned to regular classes during the school year. Use of the child's mother tongue in class varied across this sample; nearly two thirds of the pupils remaining in ESOL received additional instruction in their mother tongue. An additional 21% of them were exposed to their mother tongue in class, but not as part of the formal instruction. Teachers of 15% of the pupils reported that the mother tongue was not used at all.

In March 1974 the evaluators, project administrators, and teachers began developing a test of aural comprehension based on the ESOL curriculum. The areas selected for the test were vocabulary, verb structures, prepositions, question words, pronouns, word order, and idiomatic expressions. After items were refined, two tape-recorded versions (A and B) of the Test of Aural Comprehension (TAC) were administered in April and May 1975 to 276 pupils in 15 classes in 10 public schools. Both TAC-A and TAC-B demonstrated satisfactory reliability (alpha reliability estimate above .80).

Teachers were asked to rank pupils as high, medium, or low in aural comprehension skills. TAC scores were compared with these rankings to gauge the validity of the test. Comparisons are shown in Tables 3 and 4. In seven of the 10 classes tested with TAC-A, there was a perfect rank correlation between teachers' judgments and pupils' scores. For TAC-B, this relationship was found in five of the 11 schools tested. In 10 of these 11, pupils who were rated "high" by their teachers scored higher on the test than those who were rated "low".

ATTAINMENT OF OBJECTIVES

Objective 1: To increase the English competence of students so that they will demonstrate a statistically significant ($p < .10$) improvement on the ESOL Test of Aural Comprehension and the ESOL Speaking Test. The skills tested are listed in the "Goals to Be Assessed" section of the project's evaluation service form.

This objective was attained insofar as instrumentation was available. The ESOL-developed Test of Aural Comprehension showed that project pupils' improvement in English aural comprehension was directly related to their participation in the project.

Instruments to evaluate other aspects of project instruction were not developed. Therefore only aural comprehension was assessed; reading, writing, and speech production were not.

A forward multiple regression analysis was computed, which showed that there was a highly significant relationship between test score and length of time in the project when other variables were controlled statistically. The analysis used scores on TAC-A and TAC-B as the criterion variable for 152 pupils who were tested and for whom all necessary background information was available. Results of this analysis are shown in Table 5.

In the first part of the analysis (variables A-D) the focus was on the characteristics of pupils at the time they began ESOL instruction. The most important of these for predicting pupils' scores was grade of entry into ESOL, which accounted for 18.6% of the variance in pupils' test scores. Pupils in higher grades when first admitted to ESOL scored better than those who entered in lower grades. The longer pupils had lived on the mainland before entering ESOL, the higher they scored. Pupils whose mother tongue was Spanish scored lower than pupils who spoke another language. Pupils' sex, however, did not affect scores. These four variables (A-D) accounted for a total of 33.6% of the variability in pupils' test scores.

The analysis further showed that when these variables were held constant, there was an increase in score (statistically significant at the .0001 level) with each additional month of participation in the project. Variable E--months in ESOL--accounted for an additional 15.6% of the variance. Together, the five variables (A-E) account for almost half (49.2%) of the variability in test score.

Regression weights (unstandardized "b" in the table) provide a basis for estimating the relative impact of each variable on the raw score. Months of participation in ESOL had the greatest impact on scores; its "b" value was seven times the "b" value of time on the mainland without (before) ESOL. This showed that pupils' acquisition of aural comprehension skills was much more rapid when they were in ESOL than when they lived in an English-speaking area without ESOL participation.

Objective 2: To determine the merits of three ESOL instructional patterns: Alpha (three hours of ESOL, two hours of regular English-language classroom instruction), Beta (three hours of ESOL, two hours of instruction in Spanish), and Gamma (four hours of ESOL, one hour of bicultural education).

This objective was partially attained. Two of the three dimensions of the models were examined; amount of ESOL per week was found to affect test scores, but use of the mother tongue in instruction had no significant effect.

Relative impact of the two major variables--weekly hours of ESOL instruction and use of mother tongue in class--was assessed through the regression analysis that was used in connection with Objective 1. As part of this assessment, class size and the interaction of class size with number of hours per week were also included as variables. (In this part of the regression analysis, the statistical assumption that all observations are independent was violated. The effect was to risk overestimating the statistical significance of the Objective 2 variables.)

The relationships of the variables to test scores are shown in Table 5. Only one of the four variables, instruction hours per week, had impact on TAC scores when variables related to Objective 1 were held constant. This variable accounted for an additional 5.1% of test score. The negative sign of the unstandardized "b" indicated that the more hours per week a pupil studied ESOL, the lower was his TAC score. Rather than showing the impact of the number of ESOL instructional hours, this relationship may reflect the practice of assigning pupils with the least English competence to the most hours of instruction. This would indicate that pupils who needed the most hours of instruction (as indicated by low TAC scores) were receiving them.

No significant relationship to test score was found when use of the mother tongue in class, class size, and interaction of class size with instruction hours per week were respectively entered into the regression equation. This suggested that instruction in pupils' mother tongue did not significantly affect English acquisition, and that (within the range observed) class size did not affect pupil performance either independently or in conjunction with number of instruction hours per week.

SUMMARY AND CONCLUSIONS

The English to Speakers of Other Languages project was developed to meet the needs of the large numbers of non-English-speaking children who entered school with limited English language competencies.

The project was implemented with great heterogeneity among sites--possibly because of its flexible response to diverse pupil needs, and therefore a program strength. Both objectives of the project were at least partially attained.

In a sample drawn from 21 classes, 62% of the pupils either received more than 150 minutes of ESOL per day or received bilingual instruction.

During the past year, a screening test was developed and administered to 4,700 pupils in Title I schools to identify those who needed ESOL. Two forms of the Test of Aural Comprehension (TAC) also were developed, and were found to be reliable and valid for pretesting and posttesting use.

After statistically controlling for sex, mother language, grade of entry into ESOL, and time in an English-speaking area without ESOL, a regression analysis of pupil performance on the TAC showed that pupils made highly significant gains while they were in ESOL. Moreover, the analysis suggested that these pupils gained at a greater rate in the project than when they were not in it.

Instruction in pupils' mother tongues showed no effect on the rate of pupils' acquisition of English. Data gathered in 1975 suggested that the pupils most in need of instruction received the most hours of instruction and were in smaller classes than are usually found in Philadelphia schools.

TABLE 1

AGE GROUPS AND PLACEMENT DECISIONS BASED ON SCREENING TESTS
IN TITLE I SCHOOLS

Placement Decision	Under Age 6 (N=130)	Ages 6-7 (N=768)	Ages 8-9 (N=818)	Ages 10-11 (N=670)	Ages 12-13 (N=625)	Ages 14-15 (N=546)	Ages 16-17 (N=187)	Over Age 17 (N=54)	All Ages (N=3,798)*
Pupil Needs ESOL	49%	46%	30%	30%	28%	39%	81%	85%	38%
Beginner Class	*37*	*23*	*9*	*12*	*13*	*12*	*21*	*20*	*15*
Intermediate Class	*10*	*18*	*15*	*10*	*9*	*17*	*33*	*22*	*15*
Advanced Class	*2*	*5*	*6*	*8*	*6*	*10*	*27*	*43*	*8*
Pupil Does Not Need ESOL	51%	54%	70%	70%	72%	61%	19%	15%	62%

*For 975 additional pupils, information on at least one of these variables was unavailable.

TABLE 2

LANGUAGE GROUPS AND PLACEMENT DECISIONS BASED ON SCREENING TESTS IN TITLE I SCHOOLS

Placement Decision	English Dominant (N=448)	Spanish Dominant (N=1,500)	Bilingual: English/Spanish (N=1,739)	Other Lang. Dominant (N=371)	Bilingual: English/Other (N=33)	All Lang. Groups (N=4,091)*
Pupil Needs ESOL	7%	72%	14%	37%	21%	37%
Beginner Class	*1*	*34*	*3*	*10*	*6*	*15*
Intermediate Class	*3*	*27*	*6*	*15*	*6*	*14*
Advanced Class	*3*	*11*	*5*	*12*	*9*	*8*
Pupil Does Not Need ESOL	93%	28%	86%	63%	79%	63%

*For 682 additional pupils, information on at least one of these variables was unavailable.

TABLE 3

MEAN TAC-A SCORES OF PUPILS GROUPED BY TEACHER'S RANKING

School	Pupils Ranked LOW		Pupils Ranked MEDIUM		Pupils Ranked HIGH*	
	N	Score	N	Score	N	Score
A1	2	21.5	2	24.5	3	27.3
A2	3	7.5	3	10.7	3	24.9
A3	5	16.4	9	18.7	8	24.8
A4	3	31.7	9	33.1	2	33.9
A5	3	2.0	4	14.1	8	23.8
A6	4	14.8	2	1.0	4	25.1
A7	5	4.8	6	8.8	5	11.9
A8	5	10.2	7	16.5	5	11.5
A9	2	19.2	7	23.2	4	30.4
A10	2	30.2	1	17.0	1	31.5

*The HIGH group includes pupils promoted out of the project.

TABLE 4

MEAN TAC-B SCORES OF PUPILS GROUPED BY TEACHER'S RANKING

School	Pupils Ranked LOW		Pupils Ranked MEDIUM		Pupils Ranked HIGH*	
	N	Score	N	Score	N	Score
B1	2	26.8	6	26.3	2	33.3
B2	4	8.9	9	22.7	3	32.0
B3	3	10.3	12	7.6	3	10.0
B4	2	24.0	4	37.2	1	37.0
B5	4	28.6	7	24.5	6	38.6
B6	4	16.9	3	19.3	4	29.8
B7	2	4.5	4	12.0	5	14.1
B8	2	7.5	4	7.6	3	12.8
B9	2	38.5	5	36.5	3	40.3
B10	3	37.6	7	35.1	2	38.2
B11	12	10.0	8	22.7	2	32.0

*The HIGH group includes pupils promoted out of the project.

TABLE 5

REGRESSION OF TAC SCORE ON VARIOUS ESOL PUPIL AND PROGRAM CHARACTERISTICS*

Independent Variable	Multiple R	R^2	Change in R^2	Significance of R^2 Change	Simple R	b	Beta
A. Grade of Entry into ESOL	.4309	.1857	.1857	.0001	.4816	0.122	0.360
B. Months on Mainland before ESOL	.5026	.2526	.0669	.0001	.2337	0.055	0.224
C. Mother Tongue	.5784	.3345	.0819	.0001	-.3339	-0.009	-0.137
D. Sex	.5793	.3355	.0010	N.S.	-.0374	-0.319	-0.144
E. Months in ESOL	.7012	.4917	.1562	.0001	.3095	0.387	0.395
F. Instruction Hours per Week	.7365	.5425	.0508	.0003	-.3454	-0.189	-1.076
G. Mother Tongue Used in Class?	.7394	.5467	.0042	N.S.	.2347	0.125	0.090
H. Class Size	.7423	.5511	.0044	N.S.	-.1054	-0.077	-0.486
I. Interaction: F x H	.7451	.5552	.0041	N.S.	-.2907	0.009	1.061

*Based on 152 cases.

ENRICHMENT ACTIVITIES FOR HEARING-IMPAIRED PUPILS

This project offers pupils with severe auditory loss an assortment of enrichment activities including vocational training, compensatory language-skill learning, social interaction with peer groups, and creative expression.

RATIONALE

Identified needs of the Martin School's deaf and hard-of-hearing pupils are addressed by components of the project. The vocational training component provides training and practice in those fields where the pupils can expect to be employed. The additional instructional time gives individuals and small groups expanded opportunities for training and varied experiences.

The communications component provides needed opportunities for the younger pupils to improve oral language skills; it offers all pupils, parents, and school staff formal training in manual language signals and finger spelling, recognized as a need for inclusion in the school's program, but not provided during the regular school day.

The social activities component allows deaf and hard-of-hearing pupils attending from all areas of the city to interact outside a classroom setting, and encourages their social development. This experience is helpful because deaf pupils are frequently subject to exclusion by peers in their home environments.

The creative expression component is needed because even the simplest hobby activities require some degree of training which is not normally available to deaf children. This component provides pupils with competencies leading to experiences of successful achievement and concurrent development of their self-esteem.

EXPECTED OUTCOMES

It is expected that pupils will be trained in salable skills and that pupils, parents, and staff will gain competence in the use of coherent and consistent oral and manual signal systems. Younger participants are expected to improve in reading skills and enunciation. Participants should learn to interact with deaf and hard-of-hearing peers and with others. Through creative activities the pupils should develop skills in arts and crafts, their self-images should improve, and their avocational interests should be augmented.

It is expected that pupils' communication with parents and staff will improve as a result of the project.

MODE OF OPERATION

The program is planned and implemented by the school principal. Each teacher is given the opportunity to volunteer as an activity sponsor. Three instructors are also brought in from outside the Martin School to lead staff-development groups in manual signal systems. The frequency of activity sessions varies from once a month to several times a week, depending on the sponsor's availability and the participants' interest. Staff-development groups regularly meet once a week. All groups meet for an hour and a half.

Each participating faculty member sets general goals for his activity, acquires the necessary materials, supervises the pupils' activities, and keeps records of the pupils' attendance and performance.

The project's vocational activities augment the vocational training the pupils receive during the regular school day. There is instruction in keypunch operation, typewriting, woodworking, and dressmaking.

Compensatory training in manual language signaling and in finger spelling is planned for pupils. Very young pupils are taught phonics and production of speech sounds.

Social activities give the pupils an opportunity to interact with classmates in leisure pursuits. Creative activities are designed so that the pupils have a chance to attain self-expression and self-fulfillment.

Attendance is voluntary for pupils. Parents are invited to attend activity sessions, especially those after school, with their children.

PREVIOUS FINDINGS

During its first year of funding, 1973-1974, the project was successful in providing varied enrichment activities in communication, salable skills, social activities, and creative expression for pupils outside regular school hours. Enrollment and attendance rates indicated a high degree of pupil interest. However, efforts to involve parents were not successful.

THE 1974-1975 EVALUATION

The current year's evaluation of the Enrichment Activities project involved (a) fall and spring testing of specialized communication skills, (b) systematic observation and informal interviews with the project director, teachers, and pupils, and (c) review of monthly reports by teachers about pupil and parent attendance, activities undertaken, and results. Because of such considerations as winter weather and school holidays, April was used as the sample month for data regarding attainment of the project's objectives.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. Extra-curricular activities for Martin School pupils, organized by the school principal, were fully operational by October 1974. All teachers were invited to participate, and 13 of them sponsored 16 different activities designed around pupil preferences and needs in vocational development.

Pupils met in individual classrooms with their sponsors according to an established schedule. During the year, the nature and schedule of activities fluctuated to reflect pupil interest. Sessions varied in frequency from once or twice a month to several times a week, and lasted 60 to 90 minutes. All eligible pupils were invited to participate, and notification of the project was sent to their parents.

Eligible pupils were defined as all those 14 years or older, or any pupil under 14 years of age who lived within walking distance of the Martin School. School regulations prohibited deaf and hard-of-hearing pupils younger than 14 years from using public transit between home and school unless accompanied by an adult. Because almost all Martin School pupils lived beyond walking distance, and the project was scheduled after the operating hours of school busses, some Martin School pupils were unable to participate.

Staff-development sessions were organized to provide the staff of Martin School with training in manual language (signing and finger spelling). All faculty and staff were invited to participate, and 39 of the 41 professionals did so. The staff was divided into three groups according to prior experience with signing and finger spelling. Two groups' instructors were from outside the Martin School; the third was a Martin staff member qualified to teach total communication. Groups met every Tuesday after school for 60 to 90 minutes. Instruction was paced according to the group's ability.

ATTAINMENT OF OBJECTIVES

Objective 1: To engage pupils in at least one after-school activity (e.g., woodshop, cooking and kitchen skills, gardening, knitting, dressmaking, and arts and crafts).

This objective was attained.

On-site monitoring was conducted by the evaluation team, and monthly records of pupil attendance at activities were kept by the project director. Data were collected for April, selected as a sample month because it was least affected by school holidays, inclement weather, or beginning- and end-of-year activities, and therefore would give the most stable attendance figures.

An analysis of April data showed that all but one of the eligible pupils were involved in at least one activity, and the average participant was involved in more than two activities. Overall attendance for the activities was 78%, ranging from 46% to 100%. Attendance rates for individual activities are shown in Table 1.

Objective 2: To improve the level of marketable skills of pupils participating in vocational activities, as assessed by their instructors.

This objective was attained.

Three activities were conducted which directly related to the development of marketable skills--keypunching, crafts and woodworking, and advanced sewing. Average attendance rates for these activities during April were 100%, 100%, and 63% respectively. Completed articles such as dresses, tables, lamps, and metalcraft products were shown to the evaluation team by project instructors. The quality of these products was judged by the instructors to be high enough for consumer purchase. Keypunch pupils simulated commercial duties by making program cards and keypunching entire programs.

Objective 3: To improve communication in the family by inviting parents to participate with their children.

This objective was partially attained.

Interviews with the project staff revealed that parents were invited to participate in their children's enrichment activities at the beginning and periodically during the project year. However, no parental participation in such activities was reported.

Two groups of parents attended manual language classes. Each group met once a week, with five parents enrolled in one class and seven in the other. The attendance rate for April was 95%.

Objective 4: To improve the manual language abilities of pupils, as measured by an informal criterion-referenced test.

This objective was attained.

Criterion-referenced tests of expressive and receptive manual language were administered to test pupils' abilities in finger spelling and sign sentences. There were three separate test levels--preschool, lower school, and upper school. The tests, developed by the Martin School staff, were kept short because of difficulty in testing deaf children.

Pretests were given in October and posttests in June. Comparison of pretest and posttest results, shown in Table 2, revealed gains by pupils at all three levels.

A questionnaire surveyed teachers' attitudes toward their pupils' language-behavior changes since the project's inception. Thirty of the 35 respondents felt that pupils' ability to communicate with teachers and peers was "improved" or "much improved." The same proportion responded that pupils' motivation to learn signing and finger spelling also was "improved" or "much improved," and that total communication had been "effective" or "very effective" in helping pupils communicate with each other.

Objective 5: To enable teachers of the deaf to communicate using manual language, through a staff-development program.

This objective was attained.

Thirty-nine staff members were administered manual language assessments in September to determine placement in one of three training groups--advanced, intermediate, or beginner. The assessments measured receptive communications skills only.

In June, after receiving instruction in their separate groups, staff members were tested for both receptive and expressive skills in finger spelling, signed single words, and signed whole sentences. Of the 200 items on the test, participating staff achieved a mean score of 163.5 correct, or 81.7%. On 100 expressive items, the mean score was 85.9; on 100 receptive items, the mean score was 79. Although expressive skills were better developed than receptive skills, the scores revealed a considerable improvement over the rudimentary skill levels indicated in the September assessment. The whole staff had gained in the vocabulary and syntax of sign language, and also had achieved mastery of the finger-spelling alphabet.

On the teacher questionnaire, all 35 respondents reported that total communications training had improved teacher-pupil communications. All but one said that pupils' use of total communications was "more frequent" or "much more frequent" than before the project began.

SUMMARY AND CONCLUSIONS

The project provided enrichment for hearing-impaired pupils and staff development for the Martin School staff.

Both components of the project were fully implemented. The pupil-enrichment component developed vocational, leisure, and social skills. The staff-development component improved communication between pupils and staff through teachers' total-communications-skills training.

All stated objectives were fully or partially attained. Weekly sign-language training groups, attended by 12 parents, assisted parent-child communication and reinforced pupils' total communications skills. Pupils displayed high interest in extra-curricular activities; enrollment among those eligible was virtually 100%, and the sample-month attendance rate was 78%. Test results demonstrated staff mastery of rudimentary manual language skills, and pupils' scores showed that staff development in manual language was transferred effectively into the classrooms.

TABLE 1

ATTENDANCE AT ENRICHMENT ACTIVITIES DURING APRIL 1975

Activity	Number of Meetings	Number of Pupils Enrolled	Average Attendance Rate
Advanced Sewing	7	14	63%
Career Exploration	3	5	93
Crafts and Woodworking	4	10	100
Cultural Awareness	19	7	92
Driver Education	6	8	46
Girl Scouts	4	12	94
Hobby-Gardening	4	13	85
Jewelry	5	6	90
Junior National Assn. of the Deaf	5	13	85
Keypunch	8	5	100
Morning Recreation	19	10	60
Physical Fitness	4	20	81
Recreational Table Games	5	9	87
Sex Education	4	7	86
Sign Language for Upper School	5	5	88
Total	102	144	78%*

*Weighted average based on both number of meetings and number of pupils enrolled in each activity.

TABLE 2

RESULTS OF TESTS OF MANUAL LANGUAGE ABILITIES

Enrichment Activities Group	Maximum Score	Pretest		Posttest	
		N	Mean Score	N	Mean Score
Preschool	5	8	3.6	5	5.0
Lower School	7	24	3.5	16	5.3
Upper School	10	27	4.7	24	7.0

EPISCOPAL ACADEMY: SUMMER ENRICHMENT

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

In a private school campus setting, boys from the inner city who have been identified as economically disadvantaged but with academic potential participate in instructional and recreational activities. These activities are designed to remedy specific deficiencies, to stimulate academic inquiry, and to provide opportunities for the exploration of individual interests and the development of special abilities and talents.

RATIONALE

There are few programs which provide an opportunity for boys in the inner city to experience a suburban private school atmosphere while exploring their individual interests and developing special abilities and talents. In this project inner-city boys are identified who are economically disadvantaged and who are one or more years behind in basic skills such as reading, writing, spelling, oral and written expression, arithmetic, and science. They have a need for experiences beyond their own environment and for opportunities to interact constructively in group situations. These boys need also to develop their physical skills and proficiencies in athletics or leisure-time activities.

EXPECTED OUTCOMES

It is expected that participants will improve their performance in essential academic skills, increase their participation and proficiency in basic athletic skills, and learn to work and play cooperatively together.

MODE OF OPERATION

Approximately 35 sixth-grade boys are selected from eligible Title I inner-city schools in close proximity to each other and to Episcopal Academy. Each Monday through Saturday for five weeks they attend daily academic classes and participate in athletic and social activities.

Under the leadership of the project director and aided by paraprofessionals, five Episcopal Academy "master teachers" of reading, English, mathematics, science, history, and art diagnose students' learning deficiencies through tests and other evaluation techniques and provide remedial instruction. These morning activities include small-group or individual academic instruction tailored to the achievement level of each student for reinforcement of learning. Students also take field trips to sites related to their classroom subjects.

Each afternoon, students participate in group athletic activities designed to promote cooperative team behavior. They also receive individualized instruction in swimming and other nonteam sports to sharpen their psychomotor skills.

PREVIOUS FINDINGS

In 1974 (the first year it was evaluated by the School District's Office of Research and Evaluation) this summer project succeeded in providing a full program of academic and athletic instruction for inner-city sixth-grade boys in a suburban private school setting. The project attained its objectives of improving participants' academic skills and knowledge and enhancing their athletic proficiency.

THE 1974-1975 EVALUATION

As in 1974, the evaluation of the Episcopal Academy summer project focused on attainment of the project's objectives. Observations, reports, and a questionnaire were used to collect data.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. For five weeks, 32 boys who had finished sixth grade with deficiencies in basic academic skills attended the summer enrichment program. They were transported by bus six days a week from three Title I schools to suburban Episcopal Academy. Participants were divided into four ability groups of six to eight boys each, determined by reading and arithmetic scores on the Stanford Achievement Tests, which were administered by teachers at the program's start.

The evaluator assessed the project using formal (observational checklist) and informal (anecdotal record) methods during three extended monitoring visits. Narrative summaries of academic and athletic activities were written by the project director and the five teachers, and the director also responded to a detailed questionnaire.

The morning program consisted of five 25-minute classes--reading, mathematics, history, science, and art--in a daily alternating order. Each class had a teacher and two paraprofessional assistants (junior and senior Academy students). Class groups were subdivided so that pupils could be guided and tutored individually. This small-group arrangement and low pupil-teacher ratio (6:3) allowed teachers to tailor content and instructional methods to individual pupil interests and needs, thereby maximizing involvement, concentration, and motivation.

After classes, the boys ate a free lunch at a local restaurant and returned to the Academy for athletic games, sports, and swimming. Emphasizing good sportsmanship and cooperation, Academy teachers coached individuals and groups in basic athletic skills, including swimming. The boys also participated in two educationally-relevant field trips. At Ocean City, N.J., they collected and studied sea animals and shells, and created sand sculptures. At Merion Park, they observed wildlife and collected water for microscopic slide study.

Daily attendance, as reported by the project director, averaged 87%, and 28 of the 32 boys completed the program.

ATTAINMENT OF OBJECTIVES

Objective 1: To provide learning experiences to foster academic skills and knowledge in reading, writing, spelling, oral and written expression, arithmetic, and science, as indicated on an observational checklist and as reported by the project director and teachers.

The objective was attained.

An eight-page narrative summary of activities was written and submitted by the project director and five master teachers at the project's end. Using specific input from his staff, the project director also responded to a 12-page, 49-item questionnaire which assessed the project's components. The evaluator used a locally-developed, project-specific checklist, which contained 26 items and space for subjective comments, during three extended observations--two of morning classes and one of afternoon activities.

Observational checklist data and informal observations by the evaluator indicated that activities requiring writing, spelling, and oral and written expression were emphasized in daily English and history classes. The evaluator and the project director noted that varied motivational teaching techniques and interesting, relevant subject matter were used by teachers and aides to encourage learning. Audiovisual aids used by the English and history teachers seemed to be especially effective in improving skills and imparting knowledge.

The reading curriculum, specially designed to encourage audiovisual word recognition, used a synchronized "read along" program. Pupils read booklets (mainly describing black athletes' careers) while they heard the words simultaneously on the tape cassette. Pupils then read the material independently and answered questions testing their reading retention, comprehension, and writing abilities.

The history program, which also concentrated on language arts, included daily library/learning-center reading sessions and weekly films on black history and other topics, followed by group discussion. At least twice a week, pupils submitted written reports on the filmstrips, books, and/or magazines they studied.

Varied instructional techniques were used effectively to increase pupils' knowledge of basic mathematical concepts. Teachers utilized drills, worksheets, and motivational games to teach basic mathematics skills.

An experiential/cognitive learning approach in science allowed pupils to experiment and discover basic concepts of biology and chemistry. While studying anatomy and biochemistry, pupils cared for laboratory animals, performed dissections, mixed chemicals, charted chemical reactions, prepared and viewed microscopic slides, experimented with handmade cameras, and observed a boa constrictor devouring a live mouse.

The art program focused primarily on molding and sculpting, through which the boys expressed their creative abilities. Each pupil completed at least three objects which were glazed, fired, and taken home.

Objective 2: To promote harmonious group living and to foster basic physical skills through encouragement of participation and proficiency in sports and development of habits and skills worthy of use in leisure time, as indicated on an observational checklist and as reported by the project director and teachers.

The objective was attained.

The observational checklist, questionnaire, and narrative reports related to Objective 1 were used also in connection with this objective.

Using authority and peer models, instructions, and reinforcement, teachers promoted cooperative and harmonious group behavior. Pupils, teachers, and assistants evidenced good sportsmanship, team spirit, excitement, and involvement in the sports activities.

The program fostered basic physical skills and teamwork by encouraging boys to participate and become proficient in a wide range of sports activities, including softball, kickball, touch football, basketball, soccer, and swimming. Receiving individual and group instruction, the boys showed excellent progress in learning to swim. At the beginning of the project, only five of the 32 boys could swim across the pool. On the last day, all but five boys were observed moving comfortably in deep water. By the end of the project, 12 boys passed the Red Cross Beginner swim test, nine passed the Advanced Beginner, four passed the Intermediate, and two passed the Advanced test.

SUMMARY AND CONCLUSIONS

The Episcopal Academy: Summer Enrichment project was designed to serve the academic, athletic, and interpersonal needs of inner-city sixth-grade boys at a beautiful suburban private school. The program was constructed to help remedy the boys' deficiencies in basic academic skills, through intensive learning experiences tailored by the five master teachers to the pupils' interests, abilities, and talents.

As in previous years, the current evaluation measured participants' cognitive, athletic, and interpersonal achievements. An evaluator's observational checklist, staff narrative reports, and a project-specific questionnaire were used to collect data.

The project was well-organized and fully implemented. The project director and teachers were socially concerned, understanding, and enthusiastic. All project components--the morning academic program, free lunch, afternoon sports program, and educational field trips--were popular with the boys. The average daily attendance rate for the 32 project participants was 87%.

Both objectives were fully attained. The project succeeded in providing a variety of stimulating, individualized learning experiences in reading, writing, spelling, oral and written expression, arithmetic, and science. Varied techniques were also used successfully to promote harmonious group living and improve basic physical skills. In addition, the staff continually encouraged pupils to participate and develop proficiency in sports and leisure-time activities.

The evaluator's positive appraisal of the project's well-coordinated operation and its success in accomplishing its objectives was documented by observational checklist, project-questionnaire, and narrative data. The boys' cooperative behavior, friendliness to the staff and one another, and enthusiastic involvement in the project indicated that they enjoyed this unique summer learning experience.

FOLLOW THROUGH (ESEA TITLE I COMPONENT)

Follow Through is a nationwide, comprehensive program for children in Grades K-3. It emphasizes planned variation in instructional approach, intensive parent and community involvement in school functioning, and special supportive services.

Additional Title I funding in Spring 1975 made possible a locally developed expansion of Follow Through to new schools and an extension of the regular program to fourth grade in schools already in the project. The expansion/extension program maintains all the essential characteristics of the nationwide parent program.

RATIONALE

The local project administration formulated a needs statement as the basis for introducing Follow Through in Philadelphia:

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> Children having lived in or existed under certain conditions of the city have the need for a comprehensive program in the early years. An attempt must be made to provide them with the special support services deemed important to the learning process, i.e., medical and dental care, nutrition, social and psychological services, teacher training and active parent involvement. Children need to experience a good feeling about school and its environment derived from achieving success academically and socially. There is also a need to offer alternative instructional models to improve opportunities for these children. New approaches to early childhood education must be examined in the pragmatic settings of the local schools.

EXPECTED OUTCOMES

The broad goal of Follow Through is to improve the scholastic achievement of the participating children by meeting their academic, health, and psychosocial needs through provision of a comprehensive service program for both the children and their parents. The project aims to attain this goal by providing the following services: (a) an individualized instructional program adjusted to the ability level of the child, in order to increase his productivity, self-expression, and self-confidence; (b) a continuous in-service program for all staff, administrators, and parents; and (c) health services, diagnosis, and treatment as necessary to promote the child's educational, emotional, and physical development.

MODE OF OPERATION

Nationally, there are 22 different Follow Through models, each with a different sponsor. Seven of the models are operating in Philadelphia: Bank Street, Behavior

Analysis, Bilingual, Educational Development Center (EDC), Florida Parent Education, Parent Implemented, and Philadelphia Process. Each model focuses on attainment of the project's broad goals in specific ways. Instructional variation ranges from the highly structured, specific curriculum of the Behavior Analysis model to the open classroom, nonspecific curriculum of the EDC model.

The Bank Street model combines open classroom elements with its own specific curricular materials. The Bilingual model has specific curricular elements and emphasizes simultaneous Spanish and English language development; the Florida Parent Education model is nonspecific in its curriculum but is distinguished by its use of special parent educators who train parents in home-instruction techniques in support of specific learning tasks currently being stressed in their child's classroom. The Philadelphia Process model is self-sponsored, and was established as an attempt to extend the AAAS science approach to all subject matter areas. The Parent Implemented model uses the Philadelphia Process model's curriculum, and was initially characterized by a more intensive level of parent involvement in all aspects of school functioning than was stressed in the other models. Currently, this factor is less uniquely characteristic because other models have incorporated this emphasis also.

The project's parent-involvement component is implemented by means of special Parent Advisory Committees (PACs) in the respective schools and, more recently, through a model-management strategy whereby parents are integral members of the management and decision-making team. The model-management concept, originally part of the Behavior Analysis model, is gradually being extended to all the models and schools.

In Spring 1975 the project was extended and expanded. In each of the 18 original Follow Through schools the instructional approach (model) that had formed the K-3 program was extended into fourth grade, rather than having the program terminate in third. The expanded program introduced locally developed refinements and combinations of components from the original models into the non-Follow-Through kindergarten classes at two of the original Follow Through schools, and into all kindergarten classes at 26 schools new to the project. It also introduced a bilingual program (developed by the School District's Division of Foreign Languages Education) into the kindergartens of another "new" school. The expanded program is intended to include the next higher grade in the new schools each succeeding year until it spans at least Grades K-3. (Seventeen other schools are included in the expansion, but are funded from the School District's operating budget.)

The model refinements and combinations were adopted on the basis of previous evaluation findings, and form five "options" (a term used in lieu of "model" by the local project administrators to refer to the instructional approaches in the expanded program): Option 1 combines local refinements of Behavioral Analysis techniques with regular Behavioral Analysis curricular materials; Option 2 combines locally modified aspects of the regular Behavioral Analysis and Bank Street approaches; Option 3 (proposed but not selected by any participating schools) is a Behavioral Analysis/Bilingual combination; Option 4 combines local refinements of the Bank Street approach with most of the regular Bank Street materials; Option 5 combines locally refined Bank Street techniques with Bilingual materials.

PREVIOUS FINDINGS

In the project's initial years of operation, evaluation efforts consisted of monitoring the program implementation. In the 1971-1972 school year, a form of summative evaluation was undertaken to provide the School District with pertinent information on the project's progress during the first four years of operation. (In conjunction with this effort a request from the Office of Education to supply pupil-mobility data allowed the formation of the computerized individual pupil file for the total Follow Through population; this initial file has since been expanded to provide the foundation for the comprehensive documenting orientation of subsequent evaluations.)

In comprehensive 1971-1972 surveys it was found that of all project staff, teachers, aides, and parents, 80-90% wanted that project to continue; most principals and teachers had favorable attitudes toward the project's parent-involvement component. Each year there were, on average, 10-15 regular PAC members at each school and 20-25 parents attending open PAC meetings.

During the project's first four years of operation, 60-70% of participating pupils and 75% of the teachers remained in the project. In each of the two succeeding four-year spans (1969-1970 through 1972-1973, and 1970-1971 through 1973-1974) there has been a stable retention rate of at least 60% of the pupils and teachers.

Special medical services were found to be well established in all schools; special psychological services were in need of better implementation.

On the Spring 1972 citywide achievement tests, pupils in schools using the Behavior Analysis model scored higher than the total subdistrict reference group in all first-grade subject-matter areas and in the second-grade mathematics areas. In the same testing, one district's group consisting of three different models scored higher than the total subdistrict reference group in most subject-matter areas of all grades (K-3).

In the spring of 1973, Follow Through participants scored higher on the Metropolitan Achievement Tests (MAT) than the total local comparison-school group in all kindergarten areas, in four of five first-grade areas, in all second-grade mathematics areas, and in two of the third-grade mathematics areas. Pupils in the Behavior Analysis and Bank Street models exceeded the comparison group in most test areas across all grades (K-3). Pupils in these two models also showed improvement over their 1972 performance.

In the Spring 1974 citywide testing, the total-project mean scores were significantly higher than the mean scores of a non-Follow-Through comparison group (schools included in the national comparison sample) in kindergarten and first-grade reading and mathematics. In reading and mathematics across all Grades K-3, Behavior Analysis Model pupils (with extremely rare exceptions) scored significantly higher than (a) the average for all national comparison-school pupils, (b) averages for Districts 1-6 respectively, and (c) the total School District average. No other models performed as consistently as the Behavior Analysis Model across all grades; however, the Parent Implemented Model occasionally equaled or surpassed it in Grades 1-3. Bank Street Model pupils performed consistently better than comparison pupils, respective districts, and total School District in kindergarten only; the Philadelphia Process Model excelled in first grade only.

Throughout the project, pupils who had attended prekindergarten programs and pupils with longer exposure to Follow Through generally performed significantly better than those pupils who lacked prekindergarten experience or had less Follow Through exposure. This was true especially in the Behavior Analysis Model, and to a large extent in the Bank Street, Parent Implemented, and Philadelphia Process Models. The effect of prekindergarten experience and higher exposure to Follow Through continued to be generally manifested among "graduates" of these four models currently in Grades 4 and 5. This finding suggests that there is an enduring effect of prekindergarten experience beyond third grade, contrary to the usual findings reported in research literature.

THE 1974-1975 EVALUATION

The basic comprehensive documenting approach for local evaluation was continued in the current year. A reformatting of the computerized individual pupil file and a newly developed coding scheme allowed the incorporation of more precise data on pupils' prekindergarten experience and inclusion of all "national comparison school" pupils for longitudinal tracking. A final phase of pilot-testing of the locally developed Follow Through Classroom Observation Routine (COR) took place as well as comprehensive collection of initial process-evaluation data on project implementation at the new expansion sites. The core of local evaluative reporting continued to be pupil achievement, pupil attendance, pupil and teacher mobility, parent involvement, and provision of special supportive services.

IMPLEMENTATION

The project's intended mode of operation was partially implemented.

Original Program. There was implementation improvement in some models and maintenance of high levels in others, but implementation was not universally satisfactory in the original, nationally-affiliated Follow Through program.

Original program implementation was assessed in regard to the three major components--mode of instruction (model), parent involvement, and supportive services. Implementation data were gathered from District Liaison Assistants' monthly reports, and site-visit reports by model sponsors and the Office of Education's subcontracted consultants. Additional data were available from classroom-description sections of the Follow Through Classroom Observation Routine (COR), a locally-developed pilot instrument provided information on staffing, pupil-grouping patterns, and instructional media.

Mode of Instruction. The Bank Street Model was well implemented, with a high level of sponsor input. Its integrated curriculum approach was modified to emphasize language arts and mathematics.

Implementation of the Behavior Analysis Model also continued at the same high level as in previous years. Although the token economy was not used in a few classes at one school early in the year, this was soon corrected. Optical scanning equipment, used for school-sponsor feedback, was repaired in February.

The EDC model's implementation greatly improved, with more structure in the reading and language areas. Sponsor input intensified, and excellent relationships existed between each school and its assigned sponsor consultant.

The Florida Parent Model also improved in implementation, as did the Philadelphia Process and Parent Implemented Models. This year's percentage of home visits in the Florida Parent model (65%) far exceeded that of last year (less than 40%). In recognition of the need for a more stable curriculum, plans were made to use parent scholars next year. Although the two models using the Philadelphia Process approach (Parent Implemented and Philadelphia Process) benefited from the addition of language-arts and mathematics specialists, the specialists were not allowed consistent access to classes. Also, teachers had some difficulty implementing the special science emphasis.

The Bilingual Model was satisfactorily implemented at two of the three schools. In the third, which had the largest Spanish-speaking population, the oral language component was not properly implemented and staff developers had difficulty gaining entry into classrooms. However, appointment of a Spanish-speaking principal to the school resulted in increased Spanish language instruction. In general, the Bilingual Model needed better sponsor direction and consultation.

Parent Involvement. This component was well implemented in the total program, but there were some exceptions. The unique model-management system, with direct parent participation in all decision making, was fully operational throughout the program. However, the Philadelphia Process parents did not have a high degree of autonomy.

Parent Advisory Committees (PACs) also were well implemented. During the school year, 166 to 223 executive PAC members participated monthly. Parents contributed almost 55,000 volunteer hours this year, and 76 to 130 parent scholars served the project each month. However, the Bilingual Model needed a stronger parent-involvement component, particularly bilingual personnel to interact with parent groups.

Supportive Services. Implementation of this component was seriously restricted by budgetary and contractual problems. Although medical services had the highest implementation level, two Philadelphia Process schools did not receive services until June, and a Florida Parent school until March. Psychological services were the least available, and dental services were reduced from the level of previous years. Only seven schools provided escort services to and from dental care facilities.

Expansion Program. The kindergarten expansion program in 27 additional and two original program schools was implemented late in March. Soon after the starting date, Title I funds were frozen, seriously hindering implementation. Hiring of aides and parent scholars was particularly affected by the freeze.

Before implementation, perceptions were sought from 46 principals (including those at expansion sites not funded through Title I). Of the 41 respondents, 66% felt the expansion program would have a positive effect on pupil achievement, 75% on parent participation, 71% on staff development, and 66% on instructional personnel. Of the 125 expansion teachers who also were surveyed, 67% indicated positive reactions to the news that there would be an expansion program; 69% registered the same reaction after Follow-Through training. The instructional "option" to be introduced in their schools coincided with the instructional approach preferences of 88% of the teachers.

ATTAINMENT OF OBJECTIVES

In view of the expansion program's implementation problems, all Follow Through objectives refer only to the original program. Pupil-performance data for Objectives 1-3 were based on 1975 citywide testing results. Stanford Early School Achievement Tests (SESAT) were administered in kindergarten; California Achievement Tests (CAT) in Grades 1-3. Test data were available for more than 5,000 Follow Through and 5,000 non-follow-Through (national comparison school) pupils in kindergarten through Grade 3.

Since citywide testing dates were changed this year to February, 1974-1975 and 1973-1974 test results were compared by national individual percentile ranks corresponding to mean scores. Midyear norms were not available for the SESAT; in their absence, end-of-year norms were used for the February 1975 administration.

Improvement of pupil performance, as stated in each of the first three objectives, was measured in terms of two expectations. Generally, it was expected that Follow Through pupils would perform better in 1974-1975 than in 1973-1974, and that in 1974-1975 they would outscore nonproject pupils.

Data for Objectives 5-8 were obtained from sections of monthly recording forms developed by the evaluation team. Attainment of objectives was examined on a school-by-school basis. Data needed to assess pupil-retention rates for Objective 10 were not available, because the updating of the individual pupil file was not yet completed.

Objective 1: To improve pupil performance in reading skills.

This objective was attained by the project as a whole.

The first of two expectations was that on citywide achievement tests in at least three of four grade levels (K-3) the national pupil percentile rank corresponding to the Follow Through pupils' mean score on at least one reading subtest would be higher in 1974-1975 than in 1973-1974. This expectation was met not only by the project as a whole, but also by each Follow Through model and by each district's Follow Through group.

The 1973-1974 performance rate in every reading area was exceeded by the project as a whole in Grades 1-3, and by every model and district grouping except the Philadelphia Process Model in first grade and the Bilingual, Florida Parent Education, and Parent Implemented Models in third grade.

The second expectation was that in at least three of the four grade levels the mean score on at least one reading subtest would be significantly higher for Follow Through pupils than for district groups of national-comparison-school (non-Follow-Through) pupils, total districts, and the total of Districts 1-8. This expectation was met by the project as a whole, by the Parent Implemented Model separately, and by the Follow Through group in District 4 (which included only Behavior Analysis schools). The Bank Street, Behavior Analysis, and EDC Models approached the expectation by qualifying in two (not three) of the four grade levels.

Reading performances for the total project, the four highest-achieving models (Bank Street, Behavior Analysis, Parent Implemented, and Philadelphia Process), and the total non-Follow-Through group are shown in Table 1.

Objective 2: To improve pupil performance in mathematics skills.

This objective was partially attained by the project as a whole. It was fully attained by the Behavior Analysis Model and the District 4 Follow Through group.

The first expectation was that on citywide achievement tests in at least three of four grade levels (K-3) the national pupil percentile rank corresponding to the Follow Through pupils' mean score on at least one mathematics subtest would be higher this year than last year. Although kindergarten data for the Parent Implemented Model had been lost during the 1973-1974 scoring, the available data indicated that the expectation of improvement over last year was met by the project as a whole, by each model separately (except Parent Implemented), and by each district's Follow Through group.

The Bank Street, Behavior Analysis, and Florida Parent Education Models and the District 4 Follow Through group showed higher performance in 1974-1975 than in 1973-1974 on every mathematics subtest in Grades 1-3. The EDC and Philadelphia Process Models and the total project improved in 1974-1975 in all subtests in second and third grades, and the District 5 group in all subtests in first and second grades.

The second expectation was that in at least three grade levels the mean score on at least one mathematics subtest would be significantly higher for Follow Through pupils than for district groups of national-comparison-school pupils, total districts, and the total of Districts 1-6. This expectation was met by the Behavior Analysis and Parent Implemented Models and by the Follow Through group in District 4. The project as a whole, the EDC and Florida Parent Education Models, and the Follow Through group in District 5 (Bank Street, Bilingual, and Parent Implemented schools) approached the expectation by qualifying in two (not three) of the four grade levels.

Mathematics performances for the total project, the four highest-achieving models, and the total non-Follow-Through group are compared in Table 2.

Objective 3: To improve pupil performance in language skills.

This objective was partially attained by the project as a whole. It was fully attained by the Bank Street, Behavior Analysis, and Parent Implemented Models, and by the District 4 Follow Through group.

The first expectation was that on citywide achievement tests in at least two of three grade levels (1-3) the national pupil percentile rank corresponding to the Follow Through pupils' mean score on at least one language subtest would be higher this yea[illegible]ast year. This expectation was met by the project as a whole, by ea[illegible]el separately, and by each district's Follow Through group.

The Bank Street, Behavior Analysis, Bilingual, and EDC Models, the District 4 group, and the project as a whole showed improvement in the Spelling, Mechanics, Usage, and Total Language CAT subtests at all three grade levels.

The second expectation was that in at least two grade levels the mean score on at least one language subtest would be significantly higher for Follow Through pupils than for district groups of national-comparison-school pupils, total districts, and the total of Districts 1-6. This expectation was met by the Bank Street, Behavior Analysis, and Parent Implemented Models and by the Follow Through group in District 4. The project as a whole, the Philadelphia Process Model, and the Follow Through group in District 5 approached the expectation by qualifying in one (not two) of the three grade levels.

Objective 4: To provide an effective level of parent involvement.

This objective was fully attained at 11 of the 18 Follow Through schools.

The first expectation was that in each school the Parent Advisory Committee would work with at least two community groups on a common project during the school year. This expectation was met by 14 schools, and was approached by two other schools that worked with one community group.

The second expectation was that during the school year at least 70% of each school's parents would attend at least one school meeting or affair. Attendance data for this expectation were collected monthly during the year, and were rechecked with project and school personnel. The 70% expectation was met by 14 schools, and was approached by two other schools with at least 48% attendance.

Objective 5: To provide an effective form of medical services.

This objective was fully attained at eight of the 16 schools where contracted medical services were provided by Follow Through.

The first expectation was that 100% of each school's enrollment would be screened by school health services. It was met by 16 schools, and was approached by the other two, with 82% and 79% of the pupils screened.

The second expectation was that 80% of the screened pupils referred to contracted medical services would be treated. This expectation was met by nine schools, and approached by three others, where 68% to 79% of the pupils were treated. The low attainment level was due to the implementation problems already noted in this report.

Objective 6: To provide an effective form of dental services.

This objective was fully attained at two of the 12 schools where contracted dental services were provided by Follow Through.

The first expectation was that 100% of each school's enrollment would be screened for dental problems by school health services. This expectation was met by seven schools and approached by five others, with 62% to 98% of the pupils screened.

The second expectation, that 80% of the referred students would be treated, was met by six schools and approached by six others, with 44% to 69% of the referred pupils treated. The low attainment level was due to supportive services' implementation problems.

Objective 7: To provide an effective form of psychological services.

This objective was fully attained at three of the nine schools where contracted psychological services were provided by Follow Through.

The first expectation was that 80% of the pupils referred to psychological services would be examined by a contracted agency. It was met by only four of the serviced schools and approached by four others, with at least 60% of the pupils examined.

The second expectation, that treatment or consultation would be provided for 100% of the examined pupils, was met by six schools and approached by two others, with 62% and 57% of the pupils treated. The low attainment level was due to implementation problems stemming from reduced availability of funds.

Objective 8: To provide an effective form of social services.

This objective was fully attained at six of the 18 Follow Through schools.

The first expectation was that at least 85% of each school's families would be visited by the project's School-Community Coordinator at least once during the school year. This expectation was met by 10 schools and approached by five others, with 46% to 76% of the families visited.

The second expectation was that the coordinator be involved in casework-like activities with at least 50% of the families identified as needing them. This expectation was met by seven schools and approached by seven others, with 26% to 49% of the families served.

Objective 9: To maintain a satisfactory level of teacher retention.

This objective was attained by the project as a whole.

It was expected that the rate of teacher continuance for the four-year span from 1971-1972 through 1974-1975 would be at least 60% to allow continuity of treatment within the program. Across all models, the retention rate was exactly 60%. The highest retention rates were in the Philadelphia Process (73%), Bank Street (64%), and Behavior Analysis (63%) Models. The lowest rate was in the Florida Parent Education Model (46%).

Objective 10: To maintain a satisfactory level of pupil retention.

Attainment of this objective could not be determined because the required update of the computerized individual pupil file was not yet completed.

The pupil information, when available in the new school year, is expected to indicate that at least 60% of the pupils who were in the project in 1971-1972 remained in it through 1974-1975, in which case this objective would be considered fully attained.

SUMMARY AND CONCLUSIONS

The original, nationally affiliated Follow Through project, implemented in Philadelphia for seven years, has seven different instructional approaches (models). The project was introduced only in kindergarten in 1968-1969, and was extended to higher grades, through third, over the next three years. In 16 of the 18 schools, the project has served K-3 since 1971-1972; the remaining two schools have functioned at all four grade levels since 1972-1973.

In Spring 1975, a locally-developed Follow Through expansion program was established and funded under Title I. It centered around two of the highest-achieving models, Behavior Analysis and Bank Street, and was introduced at the kindergarten level in 26 schools new to the project, and in the remaining classes at two of the original program schools. A special bilingual approach was introduced at another new site. Each succeeding year, the next grade level is planned for inclusion in the expansion program until at least third grade. In addition to the kindergarten expansion, further Title I funding allowed an extension of the original program to fourth grade, which also was initially implemented in Spring 1975.

Implementation of the kindergarten expansion and fourth-grade extension programs was not possible until Spring 1975, and then suffered from a freeze of

Title I funds. Preprogram survey data revealed, however, that a high percentage of principals and teachers at the kindergarten expansion sites were very supportive of the proposed program.

In the original program, the Bank Street and Behavior Analysis models continued high implementation, the EDC model gained notably over previous years, and the Florida Parent Education, Parent Implemented, and Philadelphia Process models also showed some improvement. In two of the three Bilingual Model schools, implementation was adequate, but in general this model was in need of additional sponsor direction and assistance.

All pupil-performance objectives were fully or partially attained. In reading and language achievement, the project as a whole, each model, and each district's Follow Through group showed percentile-rank gains over 1973-1974 performance. In mathematics, all models except the Parent Implemented showed similar improvement.

In reading, the total project, the Behavior Analysis and Parent Implemented Models, and the District 4 Follow Through group showed significantly higher performance in 1974-1975 than non-Follow-Through and total district reference groups. In mathematics and language, the Behavior Analysis and Parent Implemented models and the District 4 Follow Through group showed significantly higher performance than non-Follow-Through and total district reference groups.

The parent-involvement component was generally well implemented. Several schools' parent involvement was higher than in previous years, but a few schools failed to meet the parent-involvement objective.

Largely because of a reduced allocation of funds, implementation of the special supportive services component was below the 1973-1974 level. Implementation problems caused low attainment levels in a number of schools. The most available services were medical; psychological services were the least available.

Teacher-retention rates remained high enough to insure program continuity. Pupil continuance rates, not available for this report, were expected to remain at a level sufficient to achieve the project's intended longitudinal effect.

Overall, the Follow Through project continued to function well. The instructional and parent-involvement components were the strongest; the supportive services component needed more attention and review. The project model with the highest and most consistent pupil achievement continued to be Behavior Analysis, followed closely by the Parent Implemented and Bank Street Models.

TABLE 1

NATIONAL PERCENTILE RANKS CORRESPONDING TO MEAN SCORES ON SESAT LETTERS/SOUNDS OR CAT TOTAL READING

Grade	Non-Follow-Through (NF)	Total Follow Through (FT)	Bank Street Model (BS)	Beh. Analysis Model (BA)	Parent Implem. Model (PI)	Phila. Process Model (PP)
K	48	54**	58**	58**	58**	42
1	51	62**	64**	79**	64**	59**
2	51	53**	46	72**	60**	54**
3	49	33	28	49	45	37

**Mean score significantly higher ($p < .01$) than that of NF group.

TABLE 2

NATIONAL PERCENTILE RANKS CORRESPONDING TO MEAN SCORES ON SESAT MATHEMATICS OR CAT TOTAL MATHEMATICS

Grade	Non-Follow-Through (NF)	Total Follow Through (FT)	Bank Street Model (BS)	Beh. Analysis Model (BA)	Parent Implem. Model (PI)	Phila. Process Model (PP)
K	26	32**	38**	32**	32**	26
1	47	59**	60**	74**	49	53**
2	49	57**	62**	69**	65**	43
3	47	40	37	56**	56**	42

**Mean score significantly higher ($p<.01$) than that of NF group.

INSTITUTIONS FOR NEGLECTED AND DELINQUENT CHILDREN

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

This Title I project consists of the separate programs of 11 different custodial care institutions.

RATIONALE

Many target pupils under the care of institutions participating in this project are from culturally deprived backgrounds; their basic skills in reading, mathematics, and other subjects lag far behind the national norms for their ages and grade levels. Therefore, institutionalized pupils who either attend school within the institution or attend public schools need additional reading and mathematics instruction and cultural experiences which are seldom provided in regular school programs.

EXPECTED OUTCOMES

Each institution provides special and unique services for its children. Through these services, it is expected that the children will improve their attitudes toward themselves and toward others, improve in reading, mathematics and vocational skills, and improve in social skills to facilitate acceptable interaction with adults and peers.

MODE OF OPERATION

There is no single mode of operation for the institutions; each of them generates its own program. The various modes of operation for the current school year are described briefly in the following paragraphs.

Association for Jewish Children. The major emphasis of this program is on diagnostic testing. To meet the specific academic needs of 30 children, volunteer tutors help pupils after school four days a week. Supervision is given by an educational director and a staff psychiatrist.

Baptist Children's House. This program is intended to provide after-school tutoring for 86 pupils by a staff of three reading specialists. Recreational and arts-and-crafts supervision also are provided. The program operates after school, four days a week.

Children's Aid Society. This program is intended as a tutorial reading program for 36 pupils. Depending on their needs, pupils are tutored individually once or twice per week by a reading specialist. After-school tutoring is conducted on an individual basis.

Diagnostic Center of the Sisters of the Good Shepherd. This program provides the 48 residential pupils with instruction in English, reading, mathematics, and foreign language, and with cultural and arts-and-crafts activities during the regular school day. The agency provides four faculty members and instructional materials, and arranges trips to cultural and other events.

Girard College. The intent of this program for 360 boys is (*a*) to expand the language-arts program, and (*b*) to expand the guidance program.

Methodist Home for Children. This program provides tutorial assistance to 60 pupils after school through the use of volunteer tutors recruited from nearby colleges and coordinated by a staff member. Pupils are offered tutorial help in homework assignments as well as in skill areas and hobbies, four days a week during the school year.

Morrell School. This program provides 75 pupils at the agency's school with on-site instruction regarding drug abuse and sexual behavior by providing instructional materials, part-time instructors, and guest speakers during the regular school day.

Southern Home for Children. This program provides after-school tutoring to pupils in any areas of special need. The program has two components: an ongoing in-service training program for student tutors, and a youth-serving-youth program with approximately 10 of the eldest and academically most able project children serving as tutors to an equal number of younger and academically less able pupils. In-service training and supervision of the youth-serving-youth program are the responsibility of a supervising teacher, who also tutors three of the lowest-achieving children. A second teacher assists the supervising teacher.

Youth Development Center. This program provides after-school, small-group instruction in arts and crafts, academics, and basic modeling and grooming. In addition the youth may also travel to places of cultural interest in the Philadelphia area or elsewhere in Pennsylvania.

Youth Services, Inc. This program provides after-school, small-group instruction in reading and language arts to selected pupils. Two teachers provide services to groups of approximately five pupils. In all, 20 children receive instruction for 45 minutes three times per week. In addition, two volunteer tutors from the University of Pennsylvania Community Work-Study Program tutor pupils in mathematics and in other subjects.

Youth Study Center. The intent of this program is to present a series of after-school activities, including tutoring, sewing, crafts, and hobbies, for the pupils at the Youth Study Center. Pupil participation is voluntary. The nature and the numbers of activities are determined by pupil interest. Eighteen members of the YSC's 20-member faculty are sponsors. Activities are scheduled for one hour a day, five days a week; each activity is open to all pupils at YSC.

PREVIOUS FINDINGS

Past evaluations (1968-1974) showed that the contracted services were being provided by the institutions receiving funds.

THE 1974-1975 EVALUATION

Evaluation of the Institutions for Neglected and Delinquent Children project during the current year focused on the respective processes and accomplishments of the 11 participating institutions' programs.

IMPLEMENTATION

The project's intended mode of operation was fully implemented in three institutions and partially implemented in eight. A program was considered fully implemented if it (a) began when scheduled, (b) provided proposed services, and (c) reached the stated number of children. Starting dates for the programs are summarized in Table 1.

In discussions with the evaluator, the program directors of most institutions demonstrated a thorough understanding of their respective programs. They attributed most of the delays in program implementation to one or more of the following: (a) uncertainty about School District procedures, resulting in tardy transmittal of expenditure statements and signed contracts, (b) late hiring of program personnel, (c) an institutional policy of not starting a program until funds are in hand, and (d) organizational problems at the institution itself.

Association for Jewish Children. This program was fully implemented, and began in September. Diagnostic evaluations in reading and mathematics were provided for 22 children; although the program was capable of serving 30, additional children were not available.

Because of their psychological and/or social problems, only seven of the 22 children were willing to receive tutoring help. Although observations of the testing and tutoring situations would have been inappropriate, through interviews with the educational psychologist the evaluator determined that testing and tutoring were thorough.

Baptist Children's House. This program was partially implemented. Services were planned for 86 children; however, only 60 children received them because of a delayed starting date. Although a mathematics component was not stipulated in the proposal, pupils' deficiencies indicated a need for one. The mathematics component and part of the reading component began in November; the remainder of the reading component began in February when an additional reading teacher was hired. Cultural trips were planned, but none were taken.

Observations revealed that after-school tutoring experiences in reading and mathematics were well-executed by instructors and well-received by pupils. Informal discussions with instructors revealed planned, organized lessons, and an understanding of pupils and subject matter.

Children's Aid Society. This program was partially implemented, and began in October. All 36 children received evaluations which included achievement and psychological tests. Fifteen children were selected to receive individual instruction from a remedial reading teacher. During these tutoring sessions, a variety of reading materials on many levels were used, and a positive pupil-teacher rapport was observed.

All 36 children received additional tutoring in their residence cottage. Although the evaluator did not observe these sessions because of the nature of living groups, interviews with all supervisory personnel indicated a well-planned format. Additional support was available to house-parent tutors from the educational psychologist and the reading teacher.

Diagnostic Center of the Sisters of the Good Shepherd. This program was fully implemented, and began in September. Because of internal confusion at the institution, evaluator observations and interviews with supervisory personnel did not take place until late in the school year. Materials purchased with Title I funds for use in English, science, reading, and guitar instruction were observed by the evaluator. Thirty-two cultural trips were taken, and at least five girls participated in each. Follow-up discussions and/or quizzes were reported.

Girard College. This program was partially implemented. The language-arts component began in March; the guidance component was never instituted. Of the 360 boys who were to receive project services, only 13 received approximately 40 hours of instruction in language arts. Observations revealed that the language-arts instructor had an excellent rapport with the pupils, and that they were eager to use new program materials.

Methodist Home for Children. This program was fully implemented, and began in September. One-hour volunteer tutoring sessions were provided after school four times a week. The Institution Survey Record showed that 56 children received these services.

Tutors were observed helping children with reading and sports. The evaluator observed also a ham radio station and items constructed in the wood shop. The coordinator of volunteers met with classroom teachers of tutored children, who reported that pupils now came to class prepared with completed homework assignments.

Morrell School. This program was fully implemented and began on schedule in February. A health-education course was held for more than 75 girls. Observations in two classes revealed that information related to drug abuse and to sex was provided. Guest speakers and field trips were arranged to coincide with the topics being studied.

Southern Home for Children. This program was partially implemented, and operated in April and May. The program director reported that 26 children received an average of eight hours of tutoring in mathematics and/or reading during this two-month period. Older, more capable pupils were to have been paid to tutor younger pupils under the direction of two education specialists. The evaluator did not observe this program in operation because scheduled observation visits were not mutually convenient for the project staff and the evaluator.

Youth Development Center. The program was partially implemented, and began in March. Twenty-six pupils were tutored in mathematics, reading, and preparation for the Tests of General Educational Development. Tutoring sessions were scheduled after school on Wednesdays and Thursdays for two hours. Cultural trips stipulated in the proposal were not provided.

Youth Services, Inc. This program was partially implemented. It did not begin until November, and provided service for less than the intended 40 children. Reports showed that 10 children received an average of 42 hours of instruction from two teachers. Instruction occurred in the girls' residence cottages.

Youth Study Center. This program was partially implemented, and began in November. Services were provided throughout the school year to 174 students on a voluntary basis. Newly enacted laws limited the time a juvenile could be incarcerated at the center awaiting trial.

The program operated each afternoon for one hour. During visits to music, arts and crafts, and home-economics classes, the evaluator observed pupil enthusiasm. Program teachers displayed knowledge of the subject and understanding of their pupils.

ATTAINMENT OF OBJECTIVES

Objective 1: To improve the reading achievement of all institution children receiving instructional services in reading, as measured by the Reading subtest of CAT.

This objective was found to be inappropriate for institutions where population was transient, tutoring stressed different goals, and/or implementation was delayed.

The institutions which were scheduled to provide reading services did so. Reading instruction was observed at the Association for Jewish Children, Baptist Children's House, Children's Aid Society, Diagnostic Center of the Sisters of the Good Shepherd, Girard College, Methodist Home for Children, Southern Home for Children, Youth Development Center, Youth Services, and the Youth Study Center.

Objective 2: To improve the mathematics achievement of all institution children receiving mathematics instructional services, as measured by the Mathematics subtest of CAT.

This objective was found to be inappropriate for institutions where population was transient, tutoring stressed different goals, and/or implementation was delayed.

The institutions which were scheduled for mathematics services did provide them. Mathematics instruction was observed at the Association for Jewish Children, Baptist Children's House, Diagnostic Center of the Sisters of the Good Shepherd, Girard College, Methodist Home for Children, Southern Home for Children, Youth Development Center, Youth Services, and the Youth Study Center.

Objective 3: To provide cultural and/or instructional experiences for institution children during the regular and/or summer terms to the extent specified in the individual proposals, as determined by the Institution Survey Record.

This objective was partially attained.

Trips were taken at two institutions, the Diagnostic Center of the Sisters of the Good Shepherd and Morrell School. The trips were related to topics being studied and follow-up activities were generally scheduled. However, no trips were taken by the Baptist Children's House or Youth Development Center pupils.

Objective 4: To improve additional academic and social skills stated by individual institutions, as measured by appropriate assessment procedures.

This objective was attained. The Morrell School, which provided a Human Growth and Development program, reported that girls increased their knowledge in the areas of human behavior and health education. Pupils at the Youth Development Center showed gains in knowledge of the subjects stressed there, as reported by YDC teachers on the Institution Survey Record.

SUMMARY AND CONCLUSIONS

The Institutions for Neglected and Delinquent Children project was established to meet the needs of institutionalized children who, because of neglect and/or delinquency, had severe academic, social, and cultural deficiencies. The project's intended mode of operation was fully implemented at three institutions and partially implemented at eight. Implementation was delayed at some programs by late personnel hiring, organizational problems at the institution, an institutional policy of not starting a program until funds are in hand, and/or uncertainty about School District procedures, resulting in tardy transmittal of expenditure statements and signed contracts.

This year's evaluation grouped objectives into four main categories, since each institution emphasized mathematics and/or reading, cultural experiences, and/or other academic services. As the school year progressed, it became apparent that the two objectives dealing with student achievement as measured by the CAT were inappropriate because of transient populations, services stressing different goals, and/or delayed implementation at some sites. However, in the majority of cases, observations revealed that academic subject teachers appeared competent, had good rapport with and understanding of their students, and used appropriate instructional materials.

Two of the four institutions which proposed cultural trips actually provided them. In most cases, the trips were related to topics being studied. Additional academic and social-skill instruction were provided for other pupils; teacher-made tests showed knowledge gains.

TABLE 1

ACTUAL STARTING DATES OF REGULAR-SCHOOL-YEAR "INSTITUTIONS" PROGRAMS

First Month of Program Operations, 1974-1975	Number of Institutions Starting Their Programs
September	3
October	2
November	1
December	0
January	0
February	2*
March	2
April	1

*One of the institutions implemented its program in February as specified in its proposal. Programs at the 10 other institutions were intended to operate for the full regular school year.

INTENSIVE LEARNING CENTER

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

The Intensive Learning Center is an experimental, alternative school for children in kindergarten through Grade 4. It is divided into two multiple-graded house plans and is operated in large, open spaces. Team teaching, individualized instruction for basic skills, and student-inquiry processes are emphasized. The project focuses on proficiency in basic skills of reading, writing, and mathematics.

RATIONALE

The project has three major emphases: (a) a sequential, structured basic skill program in reading and mathematics, (b) an experiential, open education model of learning in child-oriented problem-solving situations, and (c) a parent-involvement program. These emphases have been demonstrated to be effective in improving the performance of pupils in the lower grades, and they also fit the competencies of the center's staff.

Last year, the project was found to have an inadequate conceptual base, staff problems, and inadequate pupil achievement. For the two-year period 1973-1975, emphasis is being placed on generating a valid conceptual base and on making personnel and organizational changes to implement that conception.

EXPECTED OUTCOMES

Reading and mathematics achievement has always been an important goal of the ILC. Whereas pupils in inner-city schools tend to show decreases in achievement during the third and fourth grades, ILC's emphasis on the skill development of third- and fourth-grade pupils should enable these pupils to continue the academic growth they had begun in Grades 1 and 2.

Although all project participants are bussed, they should attend school at a better rate than pupils who attend the project's four feeder schools.

It is expected that the project's parent-involvement program will include parents of both Lower and Middle House pupils, and that the parents will find the program helpful to themselves and their children.

MODE OF OPERATION

The Intensive Learning Center is an innovative school aiming at exemplary instruction for elementary-age pupils, at curriculum development, and at staff development. The school is located on the sixth floor of a converted factory building at Fifth and Luzerne Streets. With the partial exception of a small group of the youngest and least mature pupils (the Entry Class), team teaching, nongradedness, and individualization are the rule. Flexible teaching space (60' x 60' rooms) and large groups of pupils (approximately 100) also are common to the two "houses" within the ILC. Each house is staffed with teachers and aides.

Following the 1972-1973 evaluation, several changes were initiated for 1973-1974. These included (a) increased emphasis by teachers on small-group skill instruction, (b) reassignment of reading teachers to classrooms, (c) increased organic skill teaching with de-emphasis of programmed, individually prescribed instruction and computerized reading, (d) establishment of "the Center" (a spacious, open area for pupils to work with teachers, materials, and equipment in experiential, self-directed learning situations), (e) elimination of Grades 5 and 6 from the project, (f) increased emphasis on reading and mathematics in Grades 3 and 4, and (g) expansion of the parent-involvement program.

ILC's parent-involvement program (patterned after the Florida Model of the Follow-Through Program) was begun in the 1972-1973 school year. Parents are paid to visit other parents at home and train them to use school-related games and activities with their children.

PREVIOUS FINDINGS

With a new administration at ILC, 1972-1973 was a year of evaluating project assumptions, structures, techniques, and rationale. That year's evaluation indicated that ILC pupils tended to be academically weaker than pupils in the feeder schools. (As a result of that finding, a new selection system is being developed to insure a balanced pupil population.) Pupil attendance at ILC was slightly lower in 1972-1973 than in the preceding year, possibly reflecting the impact of the teacher strikes.

The 1972-1973 Metropolitan Achievement Tests and Iowa Tests of Basic Skills indicated a decrease in reading and mathematics achievement for project pupils. However, on the Individual Reading Inventory the pupils compared favorably with local norms.

All of ILC's 1973-1974 objectives were obtained for achievement, attendance, and parent involvement, reflecting a change toward accomplishing the project's stated purposes.

THE 1974-1975 EVALUATION

The evaluation of the Intensive Learning Center project for this year has focused upon the performance of third and fourth graders in relation to their first- and second-grade performance, attendance in comparison with that of feeder schools, parent exposure to the parent-involvement program, and the effect of an open environment on selected pupils.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. Direct observations of the ILC, made daily during the 1974-1975 school year, indicated that pupils were divided into two houses for skill instruction. Grades K-2 were in Lower House and Grades 3-4 were in Middle House; however, some pupils were placed according to their strengths and weaknesses rather than grade level.

Each house used a team approach to basic skill instruction. Lower House maintained its already successful program. Middle House, with all new staff except one teacher, implemented a program that intensified instruction for shorter periods of time. For 50% of the morning, half the pupils remained in the house and half went to the "center" for self-directed, inquiry-oriented activities. This provided a higher teacher-pupil ratio for basic skill instruction at Middle House.

The evaluator observed the "center" daily. Pupils chose from a wide range of activities in this large, open-space room. Six staff members provided varied activities including art, music, recreation, science, library work, and expressive arts. Pupils were allowed to select activities and staff with which to work. In a survey, the entire staff (teachers, counselor, administrators) considered the "center" a successful major change in the ILC, extremely helpful to most pupils, and worthy of continuation.

Parents indicated that the Parent Involvement Program helped their children to learn more in an easier way, and helped their school work.

ATTAINMENT OF OBJECTIVES

Objective 1: Achievement scores in reading and mathematics (Grades 3 and 4) will be equal to or greater than those of the previous school year.

The objective was partially attained.

California Achievement Tests were given to 97 pupils in Grades 3 and 4. Pretests were administered in May 1974 and posttests in February 1975. Results, shown in Table 1, indicated that pupils in both grades improved in reading since the previous school year. In mathematics, Grade 3 pupils' scores decreased by one percentile point, while Grade 4 pupils improved by two percentile points. An analysis of 97 individual pupils' percentile scores showed that 59% increased from pretest to posttest in reading, and 47% increased in mathematics.

Objective 2: Attendance at ILC will be better than at the four feeder schools.

This objective was attained.

The average daily attendance reports from ILC and its four feeder schools were computed, with the following results:

ILC	89.7
Wright	84.9
Peirce	88.1
Bethune	84.9
Potter-Thomas	84.4

Project pupils' attendance rates were better than all four feeder schools, even though ILC children were bussed from the feeder schools daily.

Objective 3: The Parent Involvement Program (PIP) will be maintained at its present level of service, and at least 80% of the parents will indicate on a 5-point scale that the program has helped them and their child a great deal.

This objective was partially attained. PIP services were maintained at one of the two houses, and parent satisfaction levels exceeded the criterion.

Since Middle House had five new teachers during 1974-1975, it was impossible to train parents. The parents assigned to Middle House also provided support services to Lower House. Lower House maintained the same level of parent services as in the previous year.

In a parent questionnaire, 84% of the respondents indicated that the PIP helped them; 87% stated that it was helpful to their child. These figures exceeded the expected 80% level of satisfaction.

Objective 4: Center staff will be able to identify 20 pupils from Grades K-4 who show a significant behavior change as a result of center involvement, and this will be noted by the regular house teacher as well. It is expected that the regular classroom teacher and center staff will concur on 80% or more of the children named.

This objective was attained.

The ILC staff identified 35 pupils who showed significant behavior changes as a result of their involvement in the project. A list was submitted to these pupils' classroom teachers, who concurred with the ILC staff on 97% of the children identified. This indicated noticeable positive behavior change since the beginning of the school year. Thus, the expected outcome was exceeded.

SUMMARY AND CONCLUSIONS

ILC is an experimental, alternative school for children in Grades K-4, emphasizing team teaching, individualized basic skill instruction, and inquiry-based education.

The project's intended mode of operation was fully implemented. Lower House and the "center" were maintained from the previous year, and Middle House's new staff worked well as a team. Implementation results were positive, indicated by substantial reductions in pupil behavior problems and increased time in direct instruction.

CAT results showed reading-achievement gains in Grades 3 and 4, and mathematics growth in Grade 4. Attendance rates at ILC exceeded those at the four feeder schools, even though all ILC pupils were bussed. The Parent Involvement Program serviced fewer parents than in the previous year, but the level of satisfaction with PIP services remained high.

Although 1974-1975 was a trying year for ILC with new Middle House staff and a pupil population notably deficient in reading and mathematics skills, the project was able to fully or partially attain all of its objectives. Findings indicated a turn toward positive educational change at ILC just at a time when the program was being phased out.

TABLE 1

MEAN SCALED SCORES (AND CORRESPONDING INDIVIDUAL PERCENTILES) OF ILC PUPILS ON CALIFORNIA ACHIEVEMENT TESTS

Current Grade	N	Test Area (Total Score)	May 1974	February 1975
3	53	Reading	292 (23)	327 (27)
		Mathematics	267 (28)	294 (27)
4	44	Reading	311 (14)	340 (20)
		Mathematics	279 (10)	302 (12)

ITINERANT HEARING SERVICE

The Itinerant Hearing Service project provides auditory and speech screening, training, and tutorial assistance to hearing-impaired children. Hearing therapists visit the schools and work with these children on a scheduled one-to-one basis.

RATIONALE

This project serves target children with varying types and levels of hearing impairment. Their problems would prevent their receiving all possible benefits from their classroom experience.

These children need specially trained therapists to diagnose their problems and give them remedial help. Direct, individual interaction with the specialist is required because of the severity of the children's hearing deficiencies.

EXPECTED OUTCOMES

Pupils are expected to improve in their areas of diagnosed weakness, such as speech patterns, use of the hearing aid, lipreading ability, linguistic skills, and decoding skills. It is also expected that the therapists will identify children who may be in need of hearing services.

MODE OF OPERATION

Therapists search for school and preschool children who have hearing loss, referring them to clinics for evaluation. Pupils diagnosed as needing the project's further services meet with hearing therapists for half-hour sessions at least twice weekly. Each therapy session is held in a small room on a one-to-one basis. Content and materials used are chosen to meet the specific needs of each pupil. The hearing therapist maintains communication with the regular classroom teacher and with parents so that each child's weaknesses can be understood and strengthened both in the regular classroom and at home.

PREVIOUS FINDINGS

The 1971-1972 evaluation revealed that some children needed resource-room support in their schools. Services provided most frequently by the hearing therapists included speech therapy, lipreading instruction, tutoring, and counseling. In 1972-1973, the ratio of speech therapists to pupils was found to be 1:12.

In 1973-1974, significant numbers of pupils showed gains on standardized tests of auditory discrimination, lipreading, vocabulary, articulation, and syntactic understanding. On a survey, classroom teachers and parents of pupils reported very favorable reactions to the project.

THE 1974-1975 EVALUATION

In the current year, evaluation of the Itinerant Hearing Service project was again designed to assess the most serious pupil needs, to determine levels of attainment, and to interpret results of appropriate tests. Hearing therapists were observed, their "search" records were reviewed, and their reports of pupil progress were analyzed. On questionnaires, teachers described the pupils' classroom behavior and evaluated their own communications with the hearing therapists. Also on questionnaires, parents indicated their perceptions of the project's impact.

IMPLEMENTATION

The project's intended mode of operation was fully implemented.

The evaluation team interviewed all Itinerant Hearing Service therapists at least once and observed their activities. Project records showed that eight of the therapists provided services for 77 hearing-impaired pupils in 63 Title I schools. Therapists' case loads varied from seven to 16 pupils, depending on the intensity of service needed by the children. Pupils were scheduled for two sessions per week, each lasting 30 to 75 minutes, depending on school space available, pupil needs, and scheduling requirements.

All pupils involved in the project were individually diagnosed as having a hearing loss of at least 30 decibels in the better ear or 50 decibels in the other. Further testing and diagnosis of the child's hearing and language disabilities were conducted by each therapist at the beginning of the year, and an individual treatment plan was designed for each child. The therapists also reviewed school health records for pupils who had failed the school nurse's hearing test, and reassessed those cases. When necessary, referrals were made to speech and hearing clinics.

In addition to the eight therapists with school-age case loads, two other therapists were involved in evaluating the hearing of preschool children. These therapists visited Head Start and Day Care centers to locate pupils needing hearing services. When necessary, the therapists gave audiological tests and/or made clinical referrals for further testing and treatment. As part of a pilot project, these therapists assumed a combined case load of 15 preschool children whom they treated individually for 90 minutes weekly from January until June.

Project therapists maintained contact between parents and school personnel so that the pupils would receive the recommended attention and reinforcement.

ATTAINMENT OF OBJECTIVES

Objective 1: To increase the communication skills of hearing-handicapped pupils by improving their use of residual hearing capacity, lipreading, speech sounds, use of acceptable speech patterns, reading skills, and aural-recognition vocabulary.

This objective was attained.

Pretests and posttests of seven tests of language development were administered to 32 randomly selected project pupils. The tests were the Goldman-Fristoe-Woodcock Test of Auditory Discrimination (Noise and Quiet subtests), Northwestern Syntax Screening Test (Expressive and Receptive subtest), Myklebust Test of Speech (Lip) Reading, Templin-Darley Screening Test of Articulation, and Peabody Picture Vocabulary Test.

All tests were administered by project personnel after receiving a review of the testing procedures. Pretests were administered in October, and posttests late in May. A one-tailed correlated t test of significance was performed for each of the seven pairs of mean scores. Results are shown in Table 1. In six of the seven instances the gain from pretest to posttest was found to be statistically significant at or beyond the .05 level. Changes in the scores of individual pupils are summarized in Table 2.

Objective 2: Itinerant teachers will communicate with counselors, teachers, and parents on pupil progress and suggestions for further help these persons can give in the home or school setting.

This objective was attained.

A questionnaire was distributed to the project staff at the end of the school year. The eight therapists with school-age case loads reported they had averaged between 14 and 15 contacts per pupil with classroom teachers and/or counselors during the school year. Since therapists spent the month of September testing and diagnosing pupils, this figure represented approximately one contact every two weeks from October until June. These contacts included discussion of pupil progress and consultation on how school personnel could assist individual pupils.

Therapists also reported an average of seven parent and/or guardian contacts per pupil during the school year. During these contacts, therapists informed parents of pupil progress and suggested ways in which parents could help their children.

Objective 3: To identify a minimum of 100 preschool children reported to have a hearing loss. Those children with a loss of 30 decibels or more in both ears or 50 decibels in one ear will be referred for treatment and recorded. A pilot treatment program will be instituted before January 1975 for at least 10 of these children.

This objective was attained.

Two therapists were charged with locating within the community hearing-impaired children under school age. According to end-of-year records, they reviewed 176 children's case histories submitted with parental consent from various medical sources, and then personally evaluated 126 of these children. Those in need of further testing or medical services were referred to clinics. Records were kept of all children seen and referred.

In January 1975, a pilot project was developed, in which 15 preschool pupils were individually treated once a week for 90 minutes. They received therapy designed to improve their residual hearing and receptive and expressive language skills, including articulation, syntax, vocabulary, lipreading, and reading-readiness skills.

Objective 4: Approximately 600 pupils in Grades K-12 who previously had failed school audiometric tests without parent follow-up will be reassessed by therapists. For those pupils found to be in need, more intensive testing will be administered, or clinical referrals will be made. Procedures for insuring clinical follow-up for pupils needing it will be developed.

This objective was partially attained.

By June 6, the eight therapists with school-age case loads had reassessed 520 pupils who had failed the school audiometric tests. Referrals were made when necessary for clinical follow-up. Each therapist, in conjunction with the school nurse, developed procedures for making referrals for the children. Project staff expressed confidence that by the end of the school year, at least 600 cases would have been reassessed and referred as necessary.

SUMMARY AND CONCLUSIONS

The Itinerant Hearing Service project provided therapy to hearing-impaired Title I pupils who could not attend or did not need a hearing resource room or a school for the deaf. These pupils had difficulty keeping up with their school work, especially reading, because of impaired language development in both the expressive and receptive modes.

The project's intended mode of operation was fully implemented. Ten hearing therapists served a total of 77 school-age and 15 preschool pupils in 68 school sites.

All objectives were fully or partially attained. Students improved in all measured areas of language skills. Communication was established between teachers and therapists, informing teachers of pupils' language-development needs so that reinforcement could be provided in the classroom. Communication between parents and therapists was also achieved.

This year, the project reassessed 520 school-age children with possible audiological problems, and conducted early evaluations of 126 younger children who would soon enter the school system.

TABLE 1

GROUP RESULTS ON TESTS TAKEN BY A SAMPLE OF ITINERANT-HEARING-SERVICE PUPILS

Test or Subtest	Administration	Pupils Tested	Highest Possible Score	Median Score	Mean Score	Standard Deviation
Goldman-Fristoe-Woodcock: Noise Subtest	Pretest	30	30	13.0	13.8	4.8
	Posttest	24	30	15.5	15.4*	5.2
Goldman-Fristoe-Woodcock: Quiet Subtest	Pretest	31	30	21.0	20.9	5.7
	Posttest	25	30	24.5	23.6**	3.7
Myklebust Speech Reading (Lipreading) Test	Pretest	31	64	52.0	51.0	9.4
	Posttest	25	64	54.5	52.9	8.5
Northwestern Syntax Screening: Expressive Subtest	Pretest	29	40	31.0	28.5	8.5
	Posttest	25	40	35.0	31.8**	4.2
Northwestern Syntax Screening: Receptive Subtest	Pretest	31	40	34.0	32.8	5.3
	Posttest	25	40	36.0	34.8**	5.3
Peabody Picture Vocabulary Test	Pretest	32	150	62.5	62.0	16.0
	Posttest	26	150	61.0	64.8**	15.2
Templin-Darley Screening Test	Pretest	31	50	41.7	39.8	8.8
	Posttest	26	50	45.5	42.9**	7.4

*Posttest score significantly higher ($p<.05$) than pretest score; *t* based on twice-tested pupils only.
**Posttest score significantly higher ($p<.01$) than pretest score; *t* based on twice-tested pupils only.

TABLE 2

CHANGE IN RAW SCORE ON TESTS TAKEN BY A SAMPLE OF ITINERANT-HEARING-SERVICE PUPILS

Test or Subtest	Pupils Tested	Pupils Who Gained	Pupils Who Did Not Change	Pupils Who Regressed
Goldman-Fristoe-Woodcock: Noise Subtest	24	18	1	5
Goldman-Fristoe-Woodcock: Quiet Subtest	25	19	4	2
Myklebust Speech Reading (Lipreading) Test	25	16	4	5
Northwestern Syntax Screening: Expressive Subtest	25	18	4	3
Northwestern Syntax Screening: Receptive Subtest	25	18	2	5
Peabody Picture Vocabulary Test	26	18	2	6
Templin-Darley Screening Test	26	20	4	2

LEARNING CENTERS

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

The Learning Centers project provides a model of supportive teacher behavior and classroom organization which utilizes an informal, individualized laboratory approach. Through the use of educational aids, activities, and games, pupils are given self-chosen experiences in basic skill areas. Teachers, parents, and administrators from target schools are served in workshops and consultations.

RATIONALE

Children from target areas tend to have low self-images, and deficiencies in oral language skills and inquiry techniques. They lack skill in symbolizing and in inductive thinking. The Learning Centers project provides these children with a learning atmosphere structured to correct their deficiencies through an activity-centered approach.

EXPECTED OUTCOMES

It is expected that the learning atmosphere will be warm, caring, and non-punitive. Pupils should improve in basic skills, in oral and written communication, and in physical, motor, and manipulative abilities. They should become contributing members of a group, and develop an understanding of themselves and their relationship to society. The pupils should learn to make choices, to be self-directive in learning and to be independent. Also, their creative and aesthetic expression should increase.

MODE OF OPERATION

The Learning Centers project is comprised of three components: the Learning Center Laboratories, the Teacher-Parent Center, and the Learning Center Headquarters. These components serve the children, teachers, school administrators, and/or parents.

The Learning Center Laboratories are located in ten target schools. They are organized to facilitate discoveries and exploratory activities in mathematics, science, and language arts. The centers are organized by a specially trained teacher who acts as a guide, motivator, and monitor. Children are taught to assist one another.

The Teacher-Parent Center at the Durham School provides whole-day teacher and community workshops on developing educational aids and the learnings they imply. Workshops are provided in mathematics, language arts, early childhood, puppetry, creative writing, recycling, and making classroom furniture and equipment. Approximately one third of staff time is devoted to providing consultative services to school staffs and parents in their respective schools.

The Learning Center Headquarters, also at the Durham School, provides materials and supportive services to other centers and to target-area administrators. Its staff conducts a number of staff-development sessions at the request of School District personnel. It also assists School District administrators in idea coordination, curriculum writing, and planning for subject-matter enrichment. The headquarters also serves as a demonstration unit for local, national, and international visitors.

All learning-center teachers attend staff-development sessions every Wednesday afternoon. Here, teachers develop ideas and games to be used in their instructional programs. At times, noncenter teachers participate in the staff-development sessions.

PREVIOUS FINDINGS

During the past four years of the project, pupils in the Peirce and Waring centers showed substantial progress in prereading, reading, and auditory vocabulary skills. The reading-achievement scores of pupils in most grades at the Durham center were found to be higher than the District 2 norms.

In 1973-1974, LC laboratory attendance was found on the average to be greater than both total-school attendance and attendance of selected same-school comparison groups. On the Language, Mathematics, and Reading subtests of the California Achievement Tests (1970 edition), LC pupils exceeded the respective district average scores in 18 of 45 comparisons. Pupils in the two self-contained LC laboratories exceeded the district average in every comparison. The large numbers of teachers, parents, and administrators who voluntarily sought assistance in either the Teacher-Parent Center or the Learning Center Headquarters, and the positive responses to the Teacher Center Survey, were interpreted as an indication of both the need for and the success of these components of the project.

THE 1974-1975 EVALUATION

The current year's evaluation of the Learning Centers project focused on the problem-solving, mathematics-concept-formation, and communication skills of participating pupils, and the activities and effectiveness of the Teacher-Parent Center and the Learning Center Headquarters.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. Learning Center Laboratories directly aided 1,890 preschool and junior high children by providing discovery-oriented instruction in mathematics and other basic skills. The Teacher-Parent Center trained more than 6,000 teachers and parents from almost every Title I school. Learning Center Headquarters provided planning assistance to more than 50 School District administrators.

Learning Center Laboratories were located in 10 Title I schools. At eight labs, children attended two or three hours per week. Another center was a self-contained LC lab, where pupils spent all their instructional time. The remaining lab, in a school for physically handicapped pupils, was not operational because an LC teacher certified to teach these special pupils could not be found.

LC lab structure was determined by the pupil population's needs. One center included a preschool lab, where three- and four-year-old children received prekindergarten readiness activities such as color identification and counting exercises. In a communications-arts lab, oral and written skills were developed through closed-circuit television and photography. The self-contained LC lab engaged second- and third-grade children in informal learning activities, using adding machines, typewriters, and experience stories.

One of the more unusual LC lab programs was in operation at the Bishop Learning Center. Title I pupils from District 4 attending this alternative junior high school were involved in repairs and alterations of the recycled facility. Pupils functioned as apprentices to the teacher in planning, fabricating, and installing improvements. They also helped the teacher to make repairs on equipment. Their activities included diagnosing problems, visualizing solutions, measuring needs, describing and recording needs, planning changes and procedures, locating and purchasing materials, disassembling and reassembling equipment, and installing materials.

The Bishop LC teacher reported that two specialized courses had been fully implemented. One involved the complete disassembly and reassembly of a four-cycle gasoline engine, including the development of tool-handling skills and the study of cooling, lubrication, bearings, carburetion, ignition, timing and sequence, measurement, and related car-repair areas. The other course involved photography, with activities including photosensitive materials, darkroom use, camera use, pinhole-camera photography, basic optics, and the mechanism of cameras. Supportive help to pupils included ongoing counseling services before and after school.

The Bishop LC teacher was also instrumental in establishing a Teacher Center to serve Districts 1 and 4, and initiating efforts to establish a Traveling Teacher Center to provide direct instructional services to teachers of a school by the invitation of the principal.

Generally, the informal activity-centered teaching approach was used in all LC labs to motivate and interest target-area children through game-like activities using colored water jars, dice, and playing cards. The metric system served as a prime source of instruction in all LC labs.

Efforts were made to increase the parents' instructional skills so they could continue some LC activities at home. Project teachers reported that parent involvement ranged from daily classroom participation to attendance at weekly instructional sessions.

The evaluation team conducted 52 systematic observations in LC labs, averaging 90 minutes each, during the school year. A 12-category observational checklist, developed by the evaluators, was used to assess classroom atmosphere selection of materials, and teacher and pupil behavior.

Physical atmosphere in the centers was considered comfortable and stimulating in all observations. Positive emotional atmosphere, evidenced by teachers' and children's happy physical appearance, was observed during 50 visits. Teacher behavior was warm and acceptant of pupils' feelings and ideas.

Pupils and teachers generally shared responsibility for selecting learning activities. In the 40 observations where pupils chose instructional materials, they either worked on materials chosen within areas prescribed by the teacher, or chose freely from educational materials.

The teaching approach generally observed in LCs was discovery oriented, and in 50 observations, teachers structured games with a clear, cognitive focus. However, pupil idea development was convergent in most observations, as LC teachers tended to accept only one answer as correct, probably because of pupils' severe basic-skill deficits. Teacher behavior in response to unexpected classroom events and pupils' problems was considered flexible, and in almost every observation teachers changed assignments, topics, and/or teaching approaches in response to pupils' problems. In 20 observations, pupils worked individually; in 32 they worked in small groups.

In 27 observations, verbal behavior was high, but the quality of language was of a lower order (descriptions, designations, simple value judgements with no justification). In the 25 remaining observations, pupils' verbal output was of high quantity and quality (classifications, definitions, generalizations, inferences). Time spent listening, initiating, and responding was divided approximately equally between teachers and pupils.

On the whole, the evaluators judged pupil self-concepts as positive. Pupils appeared physically happy, active, and well-groomed, and made positive statements about their personalities, looks, and intellectual abilities. Self-discipline was also high, indicated by pupils' cooperative work. Verbal and nonverbal teacher threats and punishments were virtually nonexistent. Pupil independence (making decisions and value judgments) and purposefulness (single-mindedly carrying a task to completion) were considered high in 42 observations.

The Teacher-Parent Center, located at the Durham School, provided development sessions for teachers, aides, and parents on released- and volunteer-time bases. Specific workshops were also conducted for the Hahnemann Mental Health Consortium and many Title I projects. The main T-P center goal was to help participants develop basic skills activities and techniques that provide an exciting, stimulating learning environment. The center conducted whole- and half-day workshops emphasizing mathematics, language arts, and reading.

The project director reported that in a typical month, approximately 600 participants voluntarily attended the center. During March and April 1975, a study was conducted, showing that of the voluntary participants, 58% were teachers, 18% parents and/or parent aides, 13% student teachers in Title I classes, 6% School District supervisory personnel, 2% School District administrators, and 3% other interested persons. Ninety-five percent of the participants served Title I schools.

In mid-May, the project director reported approximately 9,000 visits to the center, including an average of 1,600 visits by parents and/or parent aides. Project staff estimated that the actual number of visits was approximately 20% greater, because visitors did not always sign the attendance register.

A teacher-parent survey was sent to 57 selected participants to assess the impact of released-daytime, after-school, and Saturday T-P workshops. The 12 respondents indicated that they attended workshops to learn techniques that reinforce reading and mathematics, furniture making, and instructional games. Workshop topics were mainly space planning and utilization, mathematics, language arts, and science.

All respondents were satisfied with T-P center experiences. Seven respondents indicated that, as a result of T-P center experiences, they had changed the physical aspects of their classrooms to provide space for pupils' free-time exploration of materials and independent activities. Respondents reported that the physical changes in classroom organization caused a change from highly structured to less structured teaching styles, using individual and group activities.

Respondents' experiences seemed to have a cognitive effect on their pupils' achievement. Respondents viewed the T-P center as friendly, well supplied with highly motivating materials, stimulating, clean, and cheerful. In a few cases, the materials were seen as overwhelming. Respondents also reported that the center staff supplied tools, materials, and ideas, and encouraged participants' independence and sharing of experiences and problems. Suggestions for changing the center included more evening hours, work in special education, space and shop experience, and that teachers should attend a one-day session each month to improve classroom instruction.

The Learning Center Headquarters, as reported by the project director, provided program enrichment, planning help, subject-matter consultation, and grant-proposal writing assistance for curriculum supervisors, principals, district superintendents, and Title I project managers.

The headquarters staff trained and supervised all LC project personnel at weekly staff-development sessions and special workshops. The headquarters staff also helped schools by locating, collecting, and/or writing curriculum materials oriented to the urban environment.

ATTAINMENT OF OBJECTIVES

Objective 1: To increase project pupils' problem-solving skills over those of comparable groups of pupils, as evidenced by a test designed to measure their ability to define a problem and form hypotheses, formulate methods of testing hypotheses, test hypotheses, and come to a conclusion.

This objective was attained.

The picture-arrangement subtest of the WISC-R was administered to 24 LC and 24 nonparticipating pupils in May 1975. The pupils were selected by matching 1974 CAT-70 Total Mathematics scaled scores. WISC results indicated that LC pupils on the average made 1.7 more correct responses than nonparticipating pupils. A correlated t test indicated that these results were significant at the .05 level.

Objective 2: To increase project pupils' skills and concept formation in mathematics and science over those of comparable groups of pupils, as evidenced by both nationally normed and locally developed tests.

This objective was attained.

The CAT-70 Total Mathematics subtest was administered to all pupils as part of the 1975 citywide testing. Sample LC pupils' scaled scores exceeded matching nonparticipating pupils' by approximately 20 points. A correlated t test indicated that the difference was significant at the .05 level.

The Key Mathematics Diagnostic Test, designed to measure pupils' mathematics concept formation, was administered to 24 LC and 24 nonparticipating pupils matched by 1974 CAT-70 Total Mathematics scores. Results indicated that LC pupils on the average made 24 more correct responses than nonparticipating pupils. A correlated t test indicated that these results were significant at the .05 level.

Objective 3: To increase project pupils' skills in oral and written communication over those of comparable groups of pupils, as evidenced by both nationally normed and locally developed tests.

This objective was partially attained. At one school the LC pupils showed superiority over other pupils in oral communication; at another, they showed superiority in written communication.

A locally-developed picture-stimulus test was administered to randomly-selected LC and nonparticipating pupils at the Douglass and Jackson elementary schools. Language-arts instruction was provided as a major LC component in these two schools. The 1974 CAT-70 Total Reading subtest scores were used to match the two groups, and a t test indicated that there was no significant difference between them.

At the Douglass School, LC pupils spoke an average of 63.2 words and 6.2 sentences more than nonparticipating pupils. The t tests indicated that the differences were significant at the .005 and .0005 levels respectively. At the Jackson School, LC pupils spoke an average of 17.8 words and 1.4 sentences more than nonparticipating pupils; differences were not significant. Data are shown in Table 1.

In written form Douglass School LC pupils wrote an average of 7.7 words and 2.8 sentences more than nonparticipating pupils; differences were not significant. Jackson LC pupils wrote an average of 22.1 words and 2.9 sentences more than nonparticipating pupils, and a t test indicated that differences were significant at the .025 level. Data are shown in Table 2.

As anticipated, the significant results were in concert with the specific program emphases observed at the two centers chosen as the sample to determine attainment of this objective. The Douglass center emphasized primarily oral communication skills while the Jackson center emphasized writing skills. Even though the non-emphasized skills were tested in each center, on the average, pupils in the LC samples evidenced greater production in words and sentences than nonproject pupils.

Objective 4: To change teacher behavior and promote understanding of the Learning Centers approach, as evidenced by changes in classroom organization and use of space, motivation of pupils, clarity and depth of teacher understanding of subjects, and independent learning activities, indicated by a Teacher-Parent Center survey.

Attainment of this objective could not be determined because of the small number of Teacher-Parent Center surveys returned.

A locally-developed teacher-parent survey was sent to 57 selected participants, of which 12 responded. As a result of T-P Center experiences, the majority changed the physical aspects of their classrooms by making educational aids and giving pupils more working space for independent activities. Respondents also found center activities very practical, highly motivating, and useful in classroom instruction. Respondents indicated that as a result of their T-P experiences, they employed new curriculum materials and independent learning activities, and varied their teaching techniques.

Objective 5: To change teacher behavior in the affective area of teacher-pupil interaction toward a guidance point of view, indicated by a Teacher-Parent Center survey.

Attainment of this objective could not be determined because of the small number of the Teacher-Parent Center surveys returned.

A locally-developed teacher-parent survey was sent to 57 selected participants, of which 12 responded. The majority reported that they used more affective interaction in their classrooms as a result of T-P experiences, and changed their teaching styles from a highly structured to a more open approach. Pupil needs and feelings were recognized, and activities giving pupils free time to explore materials were instituted. All these materials, activities, and independent working spaces were suggested at T-P center workshops.

Objective 6: To help principals, supervisors, other administrative personnel, and parent-teacher-administrator groups to reorganize a division of a school, a total school, and/or a neighborhood-school interrelated learning environment, as reported by the learning-center directors from logs and personal experiences.

This objective was attained.

Learning Center Headquarters personnel reported that close relationships were developed with principals, supervisors, and district superintendents (Districts 1-4) who requested service in staff development, curriculum design, organizational problems, upgrading skills, parent education, and alternative school planning.

Elementary school project directors received assistance in coordinating long-range staff-development programs, to be implemented through special T-P center teacher-training workshops. Individual principals requested and participated in headquarters workshops concerning administrative problem solving, alternative school organization, optimal use of personnel, and efficient and aesthetic space utilization.

SUPPLEMENTAL DATA

The evaluators conducted two additional studies not included in the original evaluation design. The first, comparison of the 1975 CAT-70 reading, language-arts, and mathematics scores for pupils in the self-contained LC (Grades 2-3) at the Jackson School with the total school's scores, revealed that the study's 15 LC pupils in Grade 2 surpassed the total school on each of the subtests. However, the 11 LC third graders did not. Findings are summarized in Table 3.

The second additional study attempted to determine whether pupils who were in a self-contained LC laboratory in 1973-1974 continued to progress at the same rate in a regular classroom in 1974-1975. The difference between testing dates was seven months and the number of pupils was small (N=7). Findings are summarized in Table 4. Former LC pupils were found to have progressed at different rates in mathematics and language arts. The least loss in terms of percentile rank occurred in reading. The results showed a need for continued intensive exposure to the LC philosophy for pupils with serious basic skill deficits.

SUMMARY AND CONCLUSIONS

The Learning Centers project provided Title I pupils with a learning atmosphere structured to correct mathematics-skills deficiencies through an activity-centered inquiry approach. In addition to providing an operational model, the project instructed teachers and administrators in the implementation of LC approaches in their classrooms and schools.

The 1974-1975 evaluation process included on-site monitoring, teacher-parent questionnaires, conferences with the project director, and administration of a locally-developed picture-stimulus test, the Key Mathematics Diagnostic Test, the WISC-R picture-arrangement subtest, and the CAT-70 Total Mathematics subtest.

The Learning Centers project was fully implemented in all three components. LC laboratories provided direct services to 1,890 children from preschool to junior high school levels. During the school year, the Teacher-Parent Center trained more than 6,000 principals, teachers, paraprofessionals, and parents from more than 120 Title I schools. LC headquarters assisted more than 50 administrators with planning and organizational activities.

When compared with nonparticipants, project pupils showed increased problem-solving skills on the picture-arrangement subtest of the WISC-R. LC pupils performed significantly better than comparison pupils in concept formation as evidenced by the Key Mathematics Diagnostic Test and 1975 CAT-70 Total Mathematics subtest. In language arts, the two LCs with communications components evidenced growth in oral and/or written skills on a locally-developed picture-stimulus test.

A large number of teachers, parents, paraprofessionals, and administrators voluntarily sought assistance in the Teacher-Parent Center and the Learning Center Headquarters. Positive responses to the Teacher-Parent Center survey and suggestions for mandatory monthly workshops indicated the success of these components.

TABLE 1

TELL-A-STORY TEST SCORES OF SAMPLED LEARNING-CENTER (LC) PUPILS AND COMPARISON (COM) PUPILS

School, N, and Type of Score	Mean Raw Score		Difference (LC - Com)	Signif. of Difference
	LC	Com		
Douglass (11 LC, 11 Com):				
Word Count	106.6	43.4	+ 63.2	.005
Sentence Count	10.4	4.2	+ 6.2	.0005
Jackson (9 LC, 9 Com):				
Word Count	54.1	36.3	+ 17.8	n.s.
Sentence Count	6.7	5.3	+ 1.4	n.s.

TABLE 2

WRITE-A-STORY TEST SCORES OF SAMPLED LEARNING-CENTER (LC) PUPILS AND COMPARISON (COM) PUPILS

School, N, and Type of Score	Mean Raw Score		Difference (LC - Com)	Signif. of Difference
	LC	Com		
Douglass (41 LC, 41 Com):				
Word Count	77.2	69.5	+ 7.7	n.s.
Sentence Count	11.8	9.0	+ 2.8	n.s.
Jackson (13 LC, 13 Com):				
Word Count	50.8	28.7	+ 22.1	.025
Sentence Count	6.5	3.6	+ 2.9	.025

TABLE 3

NATIONAL INDIVIDUAL PERCENTILE RANKS CORRESPONDING TO MEAN SCORES OF LEARNING-CENTER PUPILS AND TOTAL GRADES 2 AND 3 AT JACKSON SCHOOL ON MIDYEAR CAT-70 SUBTESTS

Grade	LC Pupils Tested	Total Reading		Total Language		Total Mathematics	
		LC	Grade	LC	Grade	LC	Grade
2	15	73	68	66	58	72	65
3	11	44	56	62	79	50	69

TABLE 4

MEAN CAT-70 SCORES (GE) AND CORRESPONDING INDIVIDUAL PERCENTILE RANKS (PR) OF SEVEN PUPILS AT T. M. PEIRCE SCHOOL

Test Administration	Total Reading		Total Language		Total Mathematics	
	GE	PR	GE	PR	GE	PR
Spring 1974 (Grade 3 in self-contained Learning Center)	3.8	53	4.3	63	3.7	50
Feb. 1975 (Grade 4 in self-contained regular classroom)	4.2	46	4.4	33	3.5	24
Change	+0.4	- 7	+0.1	-30	-0.2	-26

MEET THE ARTIST

The Meet the Artist project provides target-area elementary and secondary school children with programs presented by prominent artists.

RATIONALE

Target-area children rarely have access to a variety of art experiences for the development of an appreciation of the creative arts. Talented art students in target-area high schools need additional knowledge and experiences not available through any other source for the development of their artistic abilities.

Experiential backgrounds that will motivate learning are especially needed by the target-area child. The Meet the Artist project is designed to help meet this need.

EXPECTED OUTCOMES

The project is designed to provide children with a means for developing aesthetic appreciation, visual perception, and spatial awareness. As a result, it is expected that children will be enabled to gain a more meaningful understanding and enjoyment of works of art.

Furthermore, it is expected that children will increase their ability to identify objects, colors, and shapes. With the development of sharper visual skills, pupils will be enabled to master other curricular subjects more effectively.

Participating pupils are to be encouraged to experiment with art. It is expected that through exposure to an artist they will be motivated to develop their creativity.

MODE OF OPERATION

The project is designed to serve 86 public and 35 nonpublic elementary and secondary target-area schools serving 27,000 pupils in Grades 4-12.

The Artist at Work component provides live demonstrations of the creating of paintings in assemblies for fourth-to-ninth-grade children. Outstanding professional artists paint onstage before the group of children assembled during a 45-minute period. The artist spends the remainder of his stay visiting classrooms.

The Artist to Artist component operates as a cooperative project of the School District's Division of Art Education and the Philadelphia Art Alliance. Art students in Grades 9-12 in target-area public and nonpublic schools meet in seminars with distinguished American painters and sculptors during fifteen two-hour sessions on Friday afternoons.

PREVIOUS FINDINGS

No previous findings were available because this was the project's first year of operation.

THE 1974-1975 EVALUATION

The current year's evaluation of the Meet the Artist project focused on (a) whether the visiting artist devoted a minimum of 45 minutes per demonstration, (b) whether pupils of the designated schools and grades attended, (c) whether preparatory and/or follow-up activities occurred, and (d) whether pupils benefited from their experiences. The team conducted the evaluation through on-site observations and interviews with pupils and teachers.

IMPLEMENTATION

The project's intended mode of operation was partially implemented. The Artist to Artist component was fully implemented; the Artist at Work component was partially implemented because guest artists did not visit classrooms following auditorium presentations.

The evaluation team used an observational checklist during site visits. A content analysis of each program was made and randomly sampled students and teachers were interviewed. Programs to be visited were selected from a list of artists and schedules supplied by the project director.

Artist to Artist. The evaluation team conducted five observations and interviewed 29 students and nine teachers to assess this component. Beginning in January, approximately 50 students from Title I public and nonpublic high schools displaying talent and/or interest in art were selected to participate. They met with an artist of note for three successive Friday afternoons in two-hour sessions at the Philadelphia Art Alliance. Several administrators attended each observed session, and at least one art teacher accompanied each school group.

During the first hour, the artist discussed his approach to painting or sculpture through slides and/or original works. Students were encouraged to ask questions. An intermission followed for refreshments, personal contact with the artist, and an informal tour of the gallery in which the session was held. Students with jobs were permitted to leave after the first hour.

During the second hour, discussion and interaction between students and the artist took place. The guest artist also reviewed and constructively evaluated art work students brought with them. Students were given an opportunity to closely examine the artist's original work. Students exhibited excellent attitude and behavior during all observations.

All 29 randomly-interviewed students reported that they had been notified about the program by their art teacher; most received notification at least three weeks in advance. Twenty-three of them were cognizant of the program's format beforehand.

All interviewed students liked the programs and had no adverse criticism. Most of them were enthusiastic about the information presented by the artist, especially on the nature of his work, preparation for his career, and salary. Most students felt they gained new art knowledge by participating in the program.

Although all nine interviewed teachers received program notification during January, none of them received information regarding the artist's background prior to the program. Eight teachers selected students to attend on the basis of talent and/or interest. Edison High admitted any student who desired to attend. Eight teachers planned a follow-up activity and two planned a discussion for students not attending.

Artist at Work. The evaluation team conducted four observations and randomly interviewed 34 students and 16 teachers to assess this component. During all observations, the professional artist working onstage was introduced by a School District art supervisor. The artist painted a picture while the art supervisor spoke to the children. Topics discussed were the artist's background, his present employment, displayed work, the picture being painted, materials used, and art terms. Children were permitted to ask questions at all times. Upon completion of the painting the artist also spoke to the children and answered questions.

In four of the five schools visited, the artist donated the completed painting to the school. During one observation, the artist remained in the auditorium an additional 15 minutes to interact with a few artistically talented children from each class. Artists spent an average of 50 minutes on their total presentation to the children.

A teacher accompanied each group of children to the presentation, and an art teacher attended two of the four observed sessions. Although pupil behavior was rated "good" in three observations, interest waned when the art supervisor was unable to respond to questions.

Seventeen of the 34 children interviewed were notified about the program the day it occurred, and the remaining 17 were informed approximately five days before. All interviewed children made favorable comments about the programs. In particular, they liked observing firsthand the creation of a picture by an artist, and expressed satisfaction from learning color and the use of paints.

Although fourth, fifth, and sixth graders attended the programs, first consideration was given to those in Grades 5 and 6. Two observed programs were attended by older retarded educable students.

No background information about the artist was supplied to teachers before the presentation. However, nine of the 16 teachers interviewed planned follow-up activities. Teachers felt the programs gave students an opportunity to observe the creation of quality art work, thus to develop their appreciation of art, and reinforced the school's regular art instruction.

ATTAINMENT OF OBJECTIVES

Objective: To stimulate target-area students to develop their artistic abilities in the graphic arts by affording such children the opportunity to be exposed to and interact with an artist of prominence and achievement via the Artist at Work component and/or the Philadelphia Art Alliance program.

The objective was attained.

Interviews and site visits using an observational checklist were conducted by the evaluation team. Most of the 25 teachers interviewed for both components commented that the project provided an excellent method of exposing children to various types of art that were new to them. Nineteen of the teachers felt that children were encouraged to explore art, and 15 had favorable views about students' interaction and personal contact with an artist.

All nine teachers interviewed for the Artist at Work component responded that the programs gave students a beneficial opportunity to observe a prominent artist at work and to ask questions. The Philadelphia Art Alliance program, Artist to Artist, exposed students to artists who presented their work, examined and criticized students' art forms, discussed art careers, and answered questions.

SUMMARY AND CONCLUSIONS

Meet the Artist stimulated target-area students to develop artistic abilities through contact with artists. The evaluation team conducted structured observations, program-content analyses, and 25 teacher and 63 student interviews.

The project was partially implemented. The Philadelphia Art Alliance Artist to Artist component was fully implemented, but the Artist at Work component was partially implemented in that guest artists did not visit individual classrooms after auditorium presentations.

Both components enabled Title I children in Grades 4-12 to come into contact with artists of note. High school students talented and/or interested in art received the benefit of artists' experience and knowledge in an intimate setting. Elementary and junior high school children observed an artist at work onstage and asked him questions.

Participating children and teachers expressed favorable views about the program. Teachers felt that children gained a deeper understanding of art and artists, and agreed that the project provided a stimulus for the pursuit of additional art activities. Children also expressed a desire for more art explorations after participating in the project.

The project objective was attained; target-area children were exposed to and interacted with an artist of prominence.

MOTIVATION

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

The Motivation project offers 10th-, 11th-, and 12th-grade students a wide variety of cultural enrichment, curriculum enrichment, and tutoring experiences designed to motivate them to seek post-high school education, particularly in a college.

RATIONALE

The Motivation project seeks to remedy seven educational needs of target-area children, which are noted in the Guidelines for Title I projects: (a) improvement of basic skills, (b) knowledge for living in modern American society, (c) experiences which motivate learning, (d) standard English speech, (e) heightened aspiration and motivation, (f) an understanding of the purposes of education, and (g) teachers who understand their pupils' problems.

The Guidelines note also that "a greater proportion of educationally deprived youngsters in low-income areas [should] not only be given a better chance of getting to college but also be equipped psychologically and educationally for success in college." The Motivation project is the only Title I project in Philadelphia whose primary goal is preparing students for college.

EXPECTED OUTCOMES

It is expected that students will gain entrance into college and will have a sufficiently solid academic foundation to succeed in college.

MODE OF OPERATION

The project aims to strengthen students academically, to expose them to cultural events, to involve their parents in the learning process, and generally to introduce them to new academic and cultural experiences not provided by the regular school program. Although its implementation varies at the 10 sites, the project usually gives students five extra class periods per week where teachers provide enrichment material (e.g., advanced work) or remedial help, such as tutoring. Tutoring is offered also before and after the regular school day. Project students have their own counselor who is trained to handle their special problems. Students attend after-school cultural events such as plays, movies, operas, ballets, and lectures. Some attend late afternoon and Saturday classes in remedial or college-level courses at nearby colleges.

PREVIOUS FINDINGS

Previous years' evaluations showed desirable results in the following areas: classroom performance, verbal and nonverbal functioning, occupational and educational aspiration levels, expectations of success, basic skills, parental involvement, attitudes toward school and learning, attendance rates, retention rates, college applications, and college acceptances. Motivation students were entering college at rates higher than would be predicted from their standardized test scores.

THE 1974-1975 EVALUATION

The current evaluation of the Motivation project examined the students' academic progress in high school, parents' opinions of the project, teachers' attitudes toward the students, and graduates' current activities.

IMPLEMENTATION

The project's intended mode of operation was fully implemented.

Each Motivation site had particular assets, problems, and constraints. One school had to roster students for extra classes before school, another school was located near college campuses, and a third served only Motivation students. Therefore, although its goals were the same everywhere, it was impossible for the project to operate identically at all sites. While all schools adhered to federal guidelines, each school stressed different ways of preparing students for college. Since the project relied on personal relationships to motivate students, the coordinators' and other employees' own beliefs also determined which components of the project were stressed at each school.

In general, Motivation students were block-rostered for English and mathematics classes, and received five extra periods a week in these subjects. Students were provided with a counselor, whose sole responsibility was to Motivation students. Tutoring was also available at each site.

In addition to curriculum enrichment, the project provided students with cultural activities. Students attended out-of-class events such as plays, operas, movies, and lectures. They were also encouraged to watch educational television shows and to participate in individual cultural activities.

The following paragraphs describe some of the specific characteristics of the Motivation project at its various sites.

Bartram. Diagnostic tests, designed by project English and mathematics teachers, were administered to incoming tenth graders. Students who performed poorly on the mathematics test repeated Algebra I. Activities included open talk sessions, an Olympics program, ecology projects, and international foods, drama, home maintenance, fashion, dance, and photography clubs.

Bok. The project at Bok had no coordinator this year. No extra periods of mathematics and English, the most essential Motivation elements, were scheduled. Basically, the program included tutoring, counseling, and cultural events.

Edison. The program offered 12-hour intensive courses in physics and chemistry for students with low marks on their second report cards. Because of rostering problems, some project students were required to attend one class after school. It was difficult to involve parents; most student-oriented activities, however, were successful.

Franklin Learning Center. Franklin Learning Center (FLC) opened this year as a center for innovative projects. Within FLC, Motivation was a highly structured project, which included cultural events, tutoring, open talk sessions, and an academic enrichment component which began in March. FLC Motivation students had their own counselor.

Gratz. All Motivation teachers were rostered for the same preparation period, so they could plan interdisciplinary units. Motivation classes emphasized the classics, with units on philosophy, epics, Greek drama, and Shakespeare. Two unusual events were a freshman picnic and the first annual Motivation homecoming.

Kensington. Kensington's program was different from other project schools in several ways. Because only girls attend Kensington, Edison Motivation students occasionally attend cultural events with them. Kensington Motivation students did not have their own counselor, and the program lacked other schools' unity. Because of the large number of Spanish-surnamed students, Spanish-oriented cultural events were scheduled. Most visits were at homes of ordinary people rather than celebrities.

Penn. The Penn program included a film festival in which students viewed and discussed films daily. Technical aspects of each film, and the issues and concepts presented were discussed. The project staff also prepared a course to be offered next year on how to take examinations.

South Philadelphia. South Philadelphia's Motivation program had a strong parent component. An average of more than 100 parents attended meetings. In open talk sessions, a psychologist met with groups of students who the coordinator felt needed social interaction. More than half the Motivation students received voluntary tutoring.

University City. In project English classes, students were taught vocabulary building, writing, and developmental reading to improve comprehension and reading rates. In mathematics classes, fundamentals, basic concepts, and problem solving were reviewed. Students were also prepared for college entrance examinations, and studied computer mathematics, logic, and mathematics-related humanities topics. Tutoring was provided for students who failed a major subject.

West Philadelphia. Motivation students participated in unusual events designed to teach them about different cultures. They met with a Brazilian university professor, a Jamaican poet, a Haitian woman, and the staff of a local French restaurant. A foreign film festival, art exhibits, and visits with university personnel were some other cultural events that Motivation students attended.

ATTAINMENT OF OBJECTIVES

Objective 1: The percentage of former Motivation students who are either in post-high school education or graduates of post-high school programs will exceed the national average of high school graduates in such programs.

This objective was attained.

In June, the evaluator mailed survey forms to 288 Class of 1973 and 211 Class of 1971 Motivation graduates. The number of graduates chosen from each school reflected the number of project graduates from that school.

Eighty-eight graduates (18%) responded to the survey. Of them, 63 (72%) were either enrolled in or graduated from a post-high school program. Since 58% of 1971 high school graduates nationally entered such programs full- or part-time, and fewer than one third of them are expected to graduate from college, this objective was considered attained.

Objective 2: Parents of Motivation students will express more positive opinions toward their children's education than will a comparable group of parents of non-Motivation children.

This objective was attained.

The objective was revised so that it would be considered attained if 90% of Motivation parents believed their child received a good high school education as a Motivation student. Questionnaires were mailed in June to 197 parents of 12th-grade Motivation students. Fifty-seven parents (29%) returned the questionnaires. Included in the questionnaire was the item, "As a Motivation student, did your child receive a good high school education?" Of the 53 parents who responded to that item, all (100%) answered "Yes".

Objective 3: Motivation students will score significantly higher in mathematics and English tests than a comparable group of students who were chosen for the program but will attend a school not eligible for Title I funds during FY 1974-1975.

This objective was attained.

The objective was revised to assess only English achievement. Students who had taken the verbal subtest of the Cooperative School and College Ability Tests (SCAT) in Grade 9 were used in this comparison. A sample of 55 Motivation students was compared with a group of 68 students whose schools became ineligible for Title I funds in the 1973-1974 school year. National percentile ranks corresponding to average scores on SCAT in Grade 9 (1973), and their average grade-equivalent scores on the Reading subtest of the California Achievement Tests (CAT) in Grade 11 (1975), are shown in Table 1.

Motivation students (national 30th percentile) had scored slightly lower than the comparison group (32nd percentile) on the SCAT in Grade 9. After one and one-half years in the project, Motivation students (10.7 GE) scored significantly higher (.10 level) than the comparison group (10.1 GE) on the CAT.

Objective 4: Teachers of project students will express more positive attitudes toward their students than will teachers of nonproject students toward their own students.

This objective was attained.

The revised criterion was that 33% of the teachers should say their attitude toward students changed constructively since teaching in the Motivation project. The revision was made because it was not possible to have nonproject-school teachers complete the questionnaires.

In June, the evaluator sent questionnaires to teachers at nine Motivation schools. Fifty teachers returned questionnaires. The surveys contained 10 open-ended items eliciting information for improving the project. One of the items was "Has your attitude toward your students changed? If so, how?" The 33% criterion was exceeded. Of the 44 teachers responding to the item, 20 (45%) answered "Yes", and listed a constructive reason, such as "closer personal relationships formed with students" and "more positive feelings generated about their growth." No teacher reported a negative change in attitude.

SUMMARY AND CONCLUSIONS

The Title I Motivation project prepared target-area students for college, improved their basic skills, provided teachers who understood students' problems, and interested parents in their children's education.

The current evaluation was an investigation of the percentage of Motivation graduates in post-high school programs, students' progress in reading, teachers' attitudes toward students, and parents' opinions of their child's education.

The project's intended mode of operation was fully implemented. Although the project had the same goals at all schools, it was implemented differently at each site. At the most successful sites, the evaluator observed more involvement and enthusiasm displayed by students, parents, teachers, school administrators, and the project staff.

All project objectives were attained. A higher percentage of Motivation graduates attended programs creditable toward a college degree than high school graduates nationwide. Motivation students read at a higher level than a comparable group of non-Motivation students. Project parents expressed positive attitudes toward Motivation, and all teachers responding to a questionnaire reported constructive changes in their attitude toward students.

TABLE 1

AVERAGE SCORES OF ELEVENTH-GRADE STUDENTS WHO WERE SELECTED FOR MOTIVATION PROJECT WHILE IN NINTH GRADE

School	N	SCAT Verbal Percentile Rank (June 1973)	CAT Reading GE Score (Feb. 1975)
Project Continued:			
Edison	9	22	10.5
Gratz (Sample)	16	29	13.0
South Philadelphia (Sample)	16	31	9.1
University City (Sample)	14	35	10.5
Total Motivation Sample	55	30	10.7
Project Discontinued after Student Selection:			
Frankford	28	32	10.2
Germantown	9	39	10.7
Olney	19	32	9.9
Overbrook	12	26	10.1
Total Comparison Group	68	32	10.1

MULTIMEDIA CENTER

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

The Multimedia Center is a clearinghouse and service center providing teachers and students in target-area schools with curriculum-related audiovisual and other instructional materials.

RATIONALE

Regular classroom instruction in target-area schools must be supplemented by meaningful sensory experiences. Research has shown that target children need instruction which appeals to their immediate concerns, utilizes concrete rather than abstract examples, and involves their direct participation.

The Multimedia Center meets the children's needs by providing teachers with various audiovisual and other instructional materials to be used in a multisensory approach to learning.

EXPECTED OUTCOMES

The Multimedia Center is expected to provide students and teachers in target-area schools with materials meeting their specific curricular needs. In addition, the center will provide in-service training in the use and maintenance of audiovisual equipment.

MODE OF OPERATION

The Multimedia Center serves as a clearinghouse for audiovisual and instructional materials such as films, filmstrips, records, tapes, pictures, transparencies, games, and books. These materials relate to such subject areas as reading, language arts, mathematics, history, and art.

Catalogs of available materials and equipment are distributed to participating schools. Teachers request materials which relate to their instructional units. These materials are provided to the schools for varying periods of time.

The center also provides maintenance service for equipment housed in participating schools, and in-service training of teacher aides and students in the use of the equipment.

PREVIOUS FINDINGS

During the project's initial years of operation, the center was organized, equipment-lending procedures were established, and preliminary in-service courses were begun. Utilization records indicated that audiovisual and other educational materials had been incorporated into the classroom curriculum.

On surveys, participating school personnel indicated that they held highly favorable attitudes regarding the center's operation, and that the materials from the center were incorporated into the ongoing classroom activities.

THE 1974-1975 EVALUATION

During the current year, evaluation of the Multimedia Center project again focused on (a) the operation of the center and (b) the extent to which materials provided by the center were incorporated into the ongoing classroom activities.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. The Multimedia Center had 1,737 audiovisual and other instructional materials--such as films, filmstrips, records, cassettes, learning kits, transparencies, and games--available for circulation. Additionally, 1,875 pieces of equipment such as 3M secretaries, record players, typewriters, cassette player/recorders, and Language Masters were permanently housed in individual schools.

Teachers requested materials weekly, listing an alternate choice for each request. Loan limits for Multimedia Center materials ranged from a week to a semester.

Between October 1974 and January 1975, the Multimedia Center coordinator conducted 30 in-service sessions lasting three and one-half hours, where 116 aides from 32 schools learned classroom use of audiovisual and other instructional materials.

Between September 1974 and January 1975, 144 sixth-grade boys from 35 schools received three hours of in-service training from the Multimedia Center coordinator, learning operation of various pieces of audiovisual equipment.

ATTAINMENT OF OBJECTIVES

Objective 1: To establish a clearinghouse of audiovisual and instructional materials that are related to the curricular needs of the pupils and teachers served in the target-area schools.

This objective was attained.

The Multimedia Center filled 8,108 (62%) of the 13,177 requests for materials during the school year.

The Multimedia Center Survey was distributed to all teachers in the 47 participating schools in March 1975 to assess (a) the type and number of materials requested and circulated by the center, (b) the extent to which the materials were used in schools, and (c) integration of the materials into the curriculum.

Eleven teachers indicated no use of the center's materials. Of the 265 users whose surveys were analyzed, 212 indicated the type and approximate number of materials used during the year. Use of materials by teachers between September 1974 and March 1975 is summarized in Table 1. Overall, teachers used an average of 44 items, of which filmstrips, films, and records were the most widely used

Multimedia Center records indicated circulation of 6,658 items for the period of time covered by the survey. The discrepancy between center records and the 9,279 uses reported by teachers was attributed to sharing of materials by several teachers in the same school. In addition to the 59% who indicated use of materials which they had requested, 39% of the survey respondents indicated that they had shared materials.

Eleven percent of the 265 surveyed teachers said they used materials daily, 19% weekly, 15% monthly, and 17% used center materials less frequently than monthly. Thirty-eight percent of the teachers reported no use or did not respond to the question. Despite varying frequency of use, 97% of the 265 teachers indicated that the materials were helpful in their classroom instruction. Teachers were asked to list any five materials used during the school year and indicate how they were integrated into the curriculum. The 1,220 examples reported by 265 teachers are summarized in Table 2. Reading and language arts accounted for 45% of the examples cited. In general, materials were used to supplement or reinforce regular classroom work.

Overall, 79% of the 265 teachers expressed satisfaction with the services of the Multimedia Center.

Objective 2: To provide paraprofessional aides and students with in-service training in the use of audiovisual hardware and software in order to insure their effective and efficient usage.

This objective was attained for both paraprofessional aides and students.

The Multimedia Center Parent-Aide In-Service Evaluation form was distributed to all 116 paraprofessionals in 32 schools who had received in-service training. Ninety (96%) of the 94 aides who completed the form responded that they were very well satisfied with the quality of their in-service training. All aides reported that their training covered proper operation and care of audiovisual equipment, and teaching techniques compatible with audiovisual aids. In addition, more than 80% of the aides indicated that they later used information from in-service sessions in the classroom.

During the current school year, 144 sixth-grade boys received in-service training as new members of their school's Cadet Corps. The Multimedia Center Principals' Evaluation of Cadet Corps form was distributed to all 35 principals whose sixth graders received the training. The principals of 29 schools responded, reporting that 247 boys in Grades 4-8 participated in the Cadet Corps during the school year. Of the 29 principals, 25 (86%) indicated that they were well satisfied with the overall performance of the students with audiovisual equipment.

Students were responsible for operating audiovisual equipment such as 16 mm movie, 8 mm movie, filmstrip, and slide projectors, tape recorders, record players, language masters, and listening centers.

SUMMARY AND CONCLUSIONS

The Multimedia Center was designed to provide audiovisual and other instructional materials and support services to Title I schools. The project's intended mode of operation was implemented, and materials were provided and integrated into classroom instruction.

Multimedia Center records indicated that 1,737 items were available for circulation. Of the 13,177 requests for materials received during the school year, 8,108 were filled. Records also indicated that circulated materials were shared by several teachers within a school.

The project attained its objectives by serving as a clearinghouse for curriculum-related materials and training aides and students to operate audiovisual equipment. Teachers appeared to make full use of available materials, using an average of 44 items from September to March in supplementing or reinforcing ongoing classroom instruction; however, only approximately 60% of their requests were filled. It appeared that if a greater number of frequently-requested and new materials were stocked, more requests could be filled, and if longer circulation time were permitted, greater integration of materials into classroom instruction might be possible.

TABLE 1

USAGE OF MULTIMEDIA CENTER MATERIALS REPORTED BY TEACHERS

Teachers Served		Total Uses	Type of Materials							
Grade	Number		Films	Film-strips	Cas-settes	Records	Learning Kits	Trans-parencies	Games	Other
K-3	55	2,556	440	718	351	572	150	117	177	31
4-6	84	3,387	808	1,103	312	540	210	236	142	36
7-10	55	2,590	652	758	281	554	210	99	33	3
Special Education and Supportive	18	746	106	327	43	90	47	107	26	0
Total	212	9,279	2,006	2,906	987	1,756	617	559	378	70
Percentage of Uses		100%	21%	31%	11%	19%	7%	6%	4%	1%

TABLE 2

CLASSROOM USE OF MULTIMEDIA CENTER MATERIALS CITED AS EXAMPLES BY TEACHERS

Subject Area	No. of Examples Cited*	Purpose				
		Introduce a Lesson	Supplement or Enrich	Clarify, Stress, or Reinforce	Provide Content Information	Provide Leisure Activity
Reading	407	34	251	189	71	91
Soc.St./Guidance	272	50	137	110	99	39
Science	141	32	64	71	51	10
Mathematics	170	19	85	115	23	22
Art or Music	63	13	22	10	25	17
Phys./Health Ed.	11	5	0	0	3	3
Foreign Language	0	0	0	0	0	0
Language Arts	139	11	66	69	26	11
Other	17	0	7	6	1	7
Total	1,220	164	632	570	299	200
Percentage of Examples*		13%	52%	47%	25%	16%

*Because many of the cited materials were used for more than one purpose, the sum of the "purpose" frequencies may exceed the number of examples cited, and the sum of the percentages exceeds 100%.

OUT-OF-SCHOOL SEQUENCED SCIENCE EXPERIENCES

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

From paired schools, sixth graders from various racial, religious, ethnic, or socioeconomic backgrounds are brought to the Franklin Institute one day per week for a six-week cycle of discovery-oriented workshops, lecture/demonstrations, and discussions on physical and biological science conducted by the Institute staff.

RATIONALE

There is a recognized need to expose urban school children to intercultural learning experiences. Currently the opportunities for interaction between children of different cultures are limited. Standardized tests have shown that Philadelphia's pupils are deficient in science knowledge as well as in basic skills. Often, elementary school teachers have had little training in science teaching and have only limited equipment and materials for teaching science in their classrooms.

One method of meeting the children's needs is to mix culturally different children in an appropriate learning environment such as the Franklin Institute. In the past, intercultural understanding, science learning, and basic skills enrichment have resulted from this approach.

EXPECTED OUTCOMES

It is expected that the project's varied learning activities will broaden and enrich the pupils' knowledge of basic biological and physical science concepts. Also, pupils should develop a greater awareness of the problem of environmental pollution and an understanding of the implications of the world's energy problems.

Project activities are designed to promote friendly, cooperative work between pupils of different backgrounds, and to give the pupils hands-on experiences using stimulating science materials not readily available in their home schools.

MODE OF OPERATION

A sixth-grade class of black public school children is paired with a sixth-grade class of black nonpublic, white public or nonpublic, or Spanish-speaking public or nonpublic school children for science experiences at the Franklin Institute. The paired children meet one day per week for a six-week cycle. The project involves a different pair of schools each Tuesday through Friday, thus involving eight schools per week, or 32 schools (and 32 teachers) in the year's four six-week cycles. Parents are invited and encouraged to participate in project activities.

Each day's session includes an inquiry-based science workshop, lecture/demonstrations followed by related discussion, completion of language-skill worksheets, lunch, guided exploration of the Institute, and occasionally an afternoon field trip relevant to the day's topic. During each activity, children from the two schools are seated alternately so that maximal social interaction is encouraged.

The pupils take home their handmade working models, which illustrate science principles learned at the Institute. Home-school teachers receive booklets as encouragement to conduct follow-up science lessons reinforcing the pupils' cognitive gains.

PREVIOUS FINDINGS

Evaluations from 1967 through 1974 indicated that achievement of project participants showed significant improvement, when measured by the Science Achievement Test given to participants and to a comparison group, and when measured by pretests and posttests given only to participants. Interactions between culturally different pupils were positive, cooperative, and task-oriented, as measured by classroom sociometric instruments. The majority of participating pupils and teachers reported that they considered the project a valuable and enjoyable educational experience.

THE 1974-1975 EVALUATION

As in 1973-1974, evaluation of the Out-of-School Sequenced Science Experiences project again focused on cognitive gains (as indicated by pretest-to-posttest gains on the Science Achievement Test) and socialization gains (as compiled on the Social-Interaction Observational Checklist). The presence of certain project-specific enabling conditions was noted by means of another observational checklist. A teacher questionnaire was used to gather home-school teachers' opinions of the extent to which the project's goals were attained.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. The evaluator made 25 visits to the project; during 17, activities were categorized on a project-specific observational checklist. In addition, 21 of the 24 home-school teachers participating in the first three cycles responded to a questionnaire. Data from both sources indicated that project activities were conducted efficiently and effectively.

During each cycle, chartered busses transported pupils between their home schools and the Franklin Institute as scheduled. During daily sessions, pupils participated in discovery workshops, class lectures and discussions, guided Institute explorations, work-sheet completion, and special Institute demonstrations. Field trips were made to the Academy of Natural Sciences, the Belmont water plant, and the Lindenwold High Speed Line.

Teachers reported that Institute instructors effectively communicated scientific information to pupils. Respondents believed that workshop experiments, classroom demonstrations, and Institute exhibits were especially valuable. Eighteen of the 21 responding teachers reported that the science lectures were at their pupils' reading levels, and workshop materials were easy to manipulate. Nineteen thought the Institute staff's instructional methods, emphasizing hands-on, discovery-type workshops, were successful in holding pupils' attention. Although all teachers reported great satisfaction with field trips, additional visitation sites were suggested for the future.

The evaluator observed and more than 90% of the responding teachers reported that during most sessions science apparatus worked properly, instructors presented directions clearly, pupils used materials in problem-solving ways, pupils were attentive to lecture-demonstrations and actively participated in discussions following them, paired-school pupils maintained assigned alternate seating during most activities, science worksheets were relevant and easily usable, and pupils took home unique materials they used and models they constructed at the Institute.

Sixteen of the 21 teachers indicated that the topics in most of the sessions were new or unfamiliar to their pupils. Thus, the project successfully exposed pupils to science facts and concepts never encountered in their regular school programs.

Seventeen respondents noted that their pupils interacted with paired-school children during guided explorations of the Institute in two to six sessions. The highest interaction between paired-school pupils took place during discovery workshops. Moderate interaction occurred during most other major program activities. Nineteen respondents noted that pupils interacted minimally on bus trips, mainly because they were not seated alternately.

During five of 17 recorded observations, the evaluator saw parents observing or actively helping pupils. Fourteen teachers reported the presence of one or more parents in from one to six sessions.

ATTAINMENT OF OBJECTIVES

Objective 1: To promote improved knowledge and understanding of selected basic concepts of biological and physical science.

The objective was attained.

The Science Achievement Test, a locally-developed 27-item, criterion-referenced mastery test, was administered by Institute instructors to 245 pupils during the first and sixth weeks of the project's third cycle. The test was the most recent version of the curriculum-tailored test used in project evaluations over the past eight years. It was divided into six subtests corresponding to the project's major topics--electricity and magnetism; light and color; motion, force, and energy; water pressure and the water cycle; air pressure and pollution; and microscopy and ecology. The reliability coefficient was .85 (KR-20).

The pretest mean score was 12.6; the posttest mean was 17.1. The mean gain of 4.5 points (statistically significant at the .001 level) indicated that the project was successful in transmitting basic science information.

Objective 2: To promote the active interchange of ideas and the attitude of cooperative work relationships between classmates of different ethnic backgrounds.

The objective was attained.

The evaluator used two locally-developed instruments--the Social Interaction Observational Checklist and a teacher questionnaire--and informal observations to gather social interaction data. During 17 monitoring visits randomly spaced over Cycles 1, 2, and 3, the evaluator used the checklist to categorize verbal and non-verbal, positive and negative, and cognitive and affective pupil communication.

The evaluator randomly selected 38 pupils and for five minutes observed each of their interactions with pupils from the paired school. Data showing amounts and types of social interaction are summarized in Table 1. Of the 38 observed pupils, 30 interacted socially and communicated with pupils from the paired school. The majority of interactions were positive or cooperative. In 29 of 30 verbal exchanges and 28 of 29 nonverbal exchanges the evaluator saw pupils cooperatively talking about their tasks, asking and answering questions, handing materials to each other, helping each other to build models, smiling, nodding, and sometimes laughing as they openly expressed their own feelings and accepted the feelings of their partners.

A 21-item questionnaire was distributed on the last days of Cycles 1, 2, and 3 to the 24 home-school teachers. Most of the 21 respondents reported that their pupils actively exchanged ideas, information, and opinions with paired-school pupils and worked cooperatively on project activities. Fourteen of them thought that as the program progressed, paired-school pupils interacted more intensely with one another.

Ten teachers noted positive attitudinal change manifested by their pupils' talking to paired-school pupils, learning their names, speaking in complimentary ways about them, exchanging pictures, and expressing sorrow in leaving them. They felt that pupils from the two schools began to interact according to personality rather than ethnic background, and that the program fostered good feelings because activities called for cooperation rather than competition.

Thus, although short in duration for each group of participants, the project attained its objective of encouraging communication between pupils of different racial, ethnic, and/or cultural backgrounds.

Objective 3: To provide a learning environment in which students are encouraged to improve their language-arts and mathematics skills.

The objective was attained.

Evaluator observations, teacher-questionnaire responses, and reports by Institute instructors indicated that science-oriented oral and written language-arts activities were a central part of each session. Pupils were encouraged to verbally express science principles they had discovered in their workshop experiences. Institute instructors stimulated pupils to structure their thinking and clarify their verbal expression.

The best pupil essay and drawing contributions, gathered from daily work sheets, were compiled by Institute instructors and reproduced in a magazine, "The Franklin Flyer," which was distributed to all participants at the end of their cycle.

Mathematics learning activities observed by the evaluator included pupils' oral responses to instructors' questions about science phenomena. Problems requiring some basic mathematical computation were also presented in science work sheets.

Nineteen of 21 teachers responding to the questionnaire felt that pupils could improve their language-arts skills through work sheets, question-and-answer sessions, and discussions. Fifteen respondents also felt pupils improved their basic mathematics skills using work sheets and classroom mathematics problems.

SUMMARY AND CONCLUSIONS

Conducted in the Franklin Institute museum and classrooms, the Out-of-School Sequenced Science Experiences project provided science, language-arts, and mathematics learning experiences to 1,120 interracially and interculturally paired sixth-grade pupils. Each of the project's four six-week cycles involved Title I pupils from eight public and nonpublic schools.

Evaluator observations during 25 visits, and home-school and Institute instructors' questionnaire responses indicated that the project was fully implemented according to the intended mode of operation. Teachers perceived the project as educationally relevant and stimulating.

The project's cognitive, social interaction, and basic skill objectives were attained. Pupils increased their average score significantly (by 4.5 points) on the 27-item Science Achievement Test. Language-arts and mathematics activities were provided within the science curriculum. Data gathered from the Social Interaction Observational Checklist, evaluator observations, and teacher questionnaires indicated that paired pupils from divergent racial, religious, and socioeconomic backgrounds interacted in a friendly, cooperative, and helpful way.

The extremely high pupil attendance rate, averaging over 92% across all sessions and cycles, was seen by the teachers and the evaluator as a major indication of pupils' high interest and sustained involvement in the project.

TABLE 1

INTERACTIONS OF 38 PUPILS WITH PUPILS FROM PAIRED SCHOOL DURING RESPECTIVE FIVE-MINUTE OBSERVATION PERIODS

Type of Interaction	Primarily Positive	Primarily Negative	No Interaction
Verbal	29	1	8
Nonverbal	28	1	9

PENNSYLVANIA ADVANCEMENT SCHOOL

PAS is an alternative, experimental middle school (Grades 5-8) whose major focus is the improvement of basic skill development (reading, writing, and mathematics) through team teaching, open education, and individualized instruction.

RATIONALE

The PAS team-based approach assumes that the middle school should be a transition between the personal, secure elementary or lower school and the less personal, large urban high school. The PAS curriculum is designed to be responsive to the needs of the early adolescent child. Team teaching and small-group instruction are emphasized, providing for individualization of instruction by accommodating different rates and styles of learning. PAS emphasizes reading and mathematics skills development and also provides a multiple enrichment program for its students. The program as a whole is designed to maximize interaction between teachers, students, and parents.

EXPECTED OUTCOMES

It is expected that students in the PAS project will perform better than comparable students in other Title I schools on achievement tests in reading and mathematics.

The average daily attendance at PAS is expected to exceed the attendance of comparable students at Cooke and Stetson Junior Highs, the two major feeder schools to PAS.

MODE OF OPERATION

In the 1973-1974 school year, PAS was almost like a new school. In the fall of 1973 its enrollment quadrupled to 810 students. This influx of students (intended to help relieve overcrowding at Stetson and Cooke Junior Highs) necessitated an expansion from two to three floors at open space and an increase from three to 11 internal teaching teams. Although the staff membership has been more stable since that expansion year, staff development continues to be emphasized.

PAS is a full middle school experience covering Grades 5-8. It has moved into vertical grouping of students with two or three grades on one team. The decision that PAS was to be a completely team-based organization resulted from the project's experience during its early years.

In the classroom, students are organized for small-group or individual instruction more than for whole-group instruction. The handling of discipline problems is characterized by parent involvement, a team approach to finding a solution, and internal handling of problems by the team before a child is sent to a counselor or floor supervisor.

PREVIOUS FINDINGS

From the inception of PAS in 1967 until June 1972, most of the evaluations were formative, without controlled studies of pupil achievement. During the 1972-1973 school year, a greater emphasis on reading and mathematics achievement was noted. Students in the Internal Program had an average daily attendance 12% higher than that of comparison groups. The handling of discipline problems was characterized by a problem-solving approach on the part of teachers, students, and parents. Teachers in the Internal Program used a wide variety of grouping arrangements in their classes.

In 1973-1974, PAS attained all of its academic achievement and attendance objectives despite the problems of a quadrupled enrollment in its Internal Program. For budgetary reasons, the PAS External Program was discontinued in June 1974.

THE 1974-1975 EVALUATION

As in 1973-1974, the current year's evaluation of the PAS project focused on basic skill development (reading, writing, and mathematics), student attendance, and the locus of control.

IMPLEMENTATION

The project's intended mode of operation was fully implemented.

The PAS program again faced a trying year organizationally. It had four floors of open space instead of three, maintained 11 teams, more than 800 students, and the same staff as in the previous year. The responsibilities of teams changed so that some teams served Grades 5 and 6 and others served Grades 7 and 8. Teams continued to have autonomy in ordering necessary materials, making some curricular decisions, and having direct control over their own rostering.

Much concern was generated among PAS staff members by conflicting reports of school expansion and budget cuts. Despite such problems, interviews of staff and observations of teams revealed that PAS teams were fully functioning. The 1974-1975 year was thoroughly effective for staff and students--even with the overriding burden of threatened reductions of staff and program.

ATTAINMENT OF OBJECTIVES

Objective 1: Students in the project will do at least as well as students from the feeder schools in reading and mathematics achievement.

This objective was partially attained. PAS students performed better than a comparison group in mathematics, but not in reading.

California Achievement Tests (CAT) were administered to all PAS students as part of the February 1975 citywide testing program. Grade 8 data were used since all eighth-grade students had been in PAS for a minimum of two years. Eighth graders at one feeder school, Stetson Junior High, were the comparison population. There were 339 pupils in the PAS population and 402 in the comparison group.

Scores are shown in Table 1. In reading, Stetson students (26th percentile average) scored higher than PAS students (19th percentile). In mathematics, PAS students (16th percentile) outscored Stetson students (14th percentile).

Supplementary data about PAS students were obtained from an informal reading inventory, administered to all PAS students in May 1974 and June 1975. Of the 345 students tested, 63% showed improvement, 26% showed decreases, and 11% showed no change in reading level. These data indicated that reading had improved in comparison to local norms and to students' own pretest levels.

Objective 2: Students in the project will maintain or increase their reading and mathematics achievement from the previous school year.

This objective was attained.

California Achievement Test results from 1973, 1974, and 1975 in reading and mathematics were compared for current eighth-grade students. Data are summarized in Tables 2 and 3.

The percentage of students scoring below the national 16th percentile was found to have decreased by 10 points in reading and by 5 points in mathematics. A year ago, the same students showed decreases of 11 percentage points in reading and 16 points in mathematics. By thus decreasing the number of low scorers, PAS was successful in bringing its low achievers closer to the national average for the second consecutive year.

Objective 3: Students will improve writing skills and increase language-arts competency, as measured by the Writing Sample.

This objective was fully attained.

All students were administered a Writing Sample pretest in October and posttest in June. Each student was given the same picture and asked to write about it for 15 minutes. Each test was scored qualitatively and results were tabulated. The 650 students who took both pre- and posttests had fewer spelling errors, and used more words greater than four letters, more sentences, more varied words, more expressed ideas, more verbal expression, and more descriptive words.

Objective 4: Students in the project will have at least 10% better attendance than the feeder schools.

This objective was partially attained. The criterion was exceeded in two of four cases.

Attendance rates for Grade 7 and 8 PAS and feeder-school students are shown in Table 4. Average daily attendance reports, collected monthly, showed that for Grade 7, PAS students (86.8% present) exceeded both Stetson (76.3%) and Cooke (80.6%). PAS attendance was 10.5 percentage points higher than Stetson and 6.2 higher than Cooke.

At the Grade 8 level, PAS students (85.5% present) exceeded both Stetson (75.3%) and Cooke (77.0%). PAS attendance was 10.2 percentage points higher than Stetson and 8.5 higher than Cooke. The objective was attained in relation to Stetson. Although PAS attendance rates were better than Cooke, the projected 10-percentage-point criterion was not attained.

Objective 5: Baseline data for PAS students will be generated in pilot work to determine the usefulness of the "locus of control" construct as a descriptive measure of PAS impact upon students.

This objective was attained.

Two instruments--the Intellectual Achievement Responsibility Questionnaire and the Norwicki-Strickland Measure of Locus of Control--were used to assess PAS students' senses of internality (making decisions at home and school) and externality (being controlled by those around them). When Locus of Control data were correlated with CAT results, results showed that (a) reading achievement was positively related to internality at home, and (b) mathematics achievement was positively related to internality both at school and at home.

Objective 6: PAS administrative, supervisory, and teaching staff will provide staff development through workshops, in-service courses, and guided observations of the PAS program. At least 3,000 training hours of this service will be provided during the school year.

This objective was attained.

The specification of 3,000 training hours was exceeded. PAS personnel provided 14,819 man-hours of workshops and in-service courses (not including guided observations). District superintendents, principals, counselors, and teachers attended these sessions.

SUMMARY AND CONCLUSIONS

PAS, an alternative middle school, used team teaching, open education, and individualized instruction to serve early adolescent students. PAS emphasized skill development and problem solving, taught in interesting ways.

Although this was another year of transition for PAS, the intended mode of operation was fully implemented, and all of its objectives were either fully or partially attained. California Achievement Test results showed growth in reading and mathematics, with a considerable reduction of students scoring below the 16th percentile from 1973 to 1975. Data from October and June Writing Samples indicated positive qualitative changes in students' abilities to write, think, and create. Locus of Control instruments were successfully used to examine students' functioning, but still need further exploration. Staff development conducted by PAS personnel far exceeded expected levels.

TABLE 1

MEAN SCALED SCORES (AND CORRESPONDING INDIVIDUAL PERCENTILES) OF PAS EIGHTH-GRADE STUDENTS ON CALIFORNIA ACHIEVEMENT TESTS

Test Area (Total Score Used)	PAS Students (N=339)	Comparison Students (N=402)
Reading	444 (19)	467 (26)
Mathematics	425 (16)	418 (14)

TABLE 2

PERCENTAGE OF PAS STUDENTS WITH CAT-70 TOTAL READING SCORES IN VARIOUS NATIONAL PERCENTILE RANGES

National Percentile Range	December 1973 (N=250)	May 1974 (N=410)	February 1975 (N=444)	Percentage-Point Change	
				1973 to 1974	1974 to 1975
Above 84th	0%	1%	1%	+ 1	0
50th-84th	2	6	9	+ 4	+ 3
16th-49th	30	36	43	+ 6	+ 7
Below 16th	68	57	47	- 11	- 10

TABLE 3

PERCENTAGE OF PAS STUDENTS WITH CAT-70 TOTAL MATHEMATICS SCORES IN VARIOUS NATIONAL PERCENTILE RANGES

National Percentile Range	December 1973 (N=255)	May 1974 (N=415)	February 1975 (N=425)	Percentage-Point Change	
				1973 to 1974	1974 to 1975
Above 84th	0%	1%	1%	+ 1	0
50th-84th	0	3	7	+ 3	+ 4
16th-49th	26	38	39	+ 12	+ 1
Below 16th	74	58	53	- 16	- 5

TABLE 4

AVERAGE DAILY ATTENDANCE RATE

School	Grade 7	Grade 8
PAS	86.8%	85.5%
Cooke	80.6%	77.0%
Stetson	76.3%	75.3%

SCHOOL-COMMUNITY COORDINATOR

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

The project employs community residents as school-community coordinators to work with parents and school personnel in transmitting information, facilitating mutual understanding, and encouraging participation between the school and the community.

RATIONALE

This project attempts to increase communication between target-area schools and the communities they serve. Because the coordinator visits students' homes, many school problems that affect individual children's academic standing and school morale can be obviated. Discipline problems, patterns of poor student attendance that are not handled by an attendance officer, and facilitation of parent conferences with principals, teachers, or counselors are problems usually resolved through the coordinator's personal contact with the student's home.

EXPECTED OUTCOMES

It is expected that the school-community coordinator will facilitate improved communication and understanding between the school and the community, as well as increased participation by school personnel and parents in school-community activities.

MODE OF OPERATION

School-community coordinators are assigned to elementary and secondary schools in target areas (approximately one or two school-community coordinators for every 1,000 to 3,000 students). One coordinator is assigned to each target elementary school, and two are assigned to each target junior or senior high school.

The coordinators' flexible work hours permit them to work various times of the day as well as on weekends. Their most important function is that of liaison between the school and the community, keeping each group informed of the other's activities, and visiting students' homes to gain information which will enable the school to operate with greater awareness of the community. In addition, the coordinators work with community agencies (e.g., mental health centers), providing a coordinated exchange of information.

The project administrators include the project director, three supervisors (professionally trained in guidance and social work), and 12 area coordinators (promoted from the position of coordinator). This staff is responsible for the supervision and professional development of the coordinators.

PREVIOUS FINDINGS

Previous SCC evaluations indicated that community residents who received visits by the coordinators were more knowledgeable about the school and participated in more school activities than those community residents who did not receive visits.

The 1973-1974 evaluation indicated that the average SCC was extensively involved in a host of activities in fulfilling her role as expediter and liaison. School personnel considered the SCC a valuable contributor and team member. Community leaders and workers representing 36 different organizations reported that the SCCs and the area coordinators functioned well as liaisons between the home, the school, and the community. A survey of the SCCs revealed that 75% of them had received at least one award or recognition for participation in community activities.

THE 1974-1975 EVALUATION

The current year's evaluation of the School-Community Coordinator project focused on (a) the specific role and function of the SCC and the area coordinator, and (b) the extent to which the average SCC carried out the SCC behavioral standards.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. The evaluation team contacted 76 project schools and interviewed 71 principals, 100 SCCs, and 12 area coordinators (ACs). The 183 respondents indicated on a questionnaire how often the SCCs performed 58 different duties. Their perceptions of SCC services are summarized in Table 1.

The SCCs, as reported by the respondents, functioned in accord with the intended mode of operation, reacting to requests from the staff and principal, developing and strengthening communication ties between the school and community, and informing parents about the school and its ancillary services.

Respondents were in substantial agreement (80%) that the SCC frequently initiated home visits, reported results of the visit to the referral person, arranged parent conferences with counselor, principal, or teacher, met parents at school, attended school meetings, and disseminated school information to the community. The SCC frequently acted as a sounding board for parental complaints, and helped interpret school/community programs to parents. The SCC was viewed as an important part of the school's system for delivering health services, engaging in numerous activities ranging from dissemination of information to parents to advising and arranging for various agencies to provide for families and children with special needs.

Respondents perceived the project as highly successful, and believed that the SCCs facilitated understanding and cooperation between school and community. They also felt that SCCs performed a needed service by interpreting the school program to parents, and by transmitting parent and community concerns to principals. Most respondents felt that SCCs were meeting and sometimes exceeding their responsibilities. However, principals desired greater flexibility in allocating SCCs' time to meet the specific needs of their schools.

Spanish-speaking SCCs in schools with large Puerto Rican populations served as interpreters for principals and faculty. Bilingual SCCs acted as a vital communication link between parents, teachers, and the school, and because this task was so time-consuming, they found it difficult to meet stated objectives.

A long-range goal of the project was to encourage the school staff to become more involved in after-school community activities. There has been extremely slow progress in this area. Teachers are concerned with their safety, because crime is a major problem in many target-area communities, especially at night. Furthermore, teachers' contracts require additional payment for attendance at after-school activities.

Area coordinators, responsible for monitoring the SCCs, reported to their supervisors twice a month and received guidance from the project director and supervisors at biweekly staff meetings.

ATTAINMENT OF OBJECTIVES

Objective 1: To have each SCC make a minimum of 75 home-visit contacts with adults each month, which shall include contacts concerned with beginning attendance problems, referrals emanating from school requests, and self-initiated visits intended to improve school-community communication.

This objective was attained.

In September 1974, the project administrator and his supervisory staff met with the 202 SCCs to train them in keeping weekly activity logs. Data were summarized into monthly logs, which were kept from September until June. The number of SCCs who actually submitted the logs to project administrators each month varied from 124 to 184.

The evaluators tabulated data from the logs and derived monthly averages of the frequencies reported for each item. The monthly averages were then collapsed into a yearly average for each item. The standard deviation for each item provided a measure of the diversity among the figures reported by the various coordinators.

The average SCC conducted 78.4 home visits per month; however, there was wide variation among coordinators. (Standard deviation was 22.9; in the frequency distribution approximately two thirds of them made between 55.5 and 101.3 visits.)

Although the objective was attained, many principals and SCCs felt that the minimum requirement of 75 home visits restricted SCCs' involvement in other areas. Principals and SCCs reported during interviews that in low-income communities where crime was frequent, the SCC has found it difficult to make a minimum of 75 home visits. Several school principals had the school custodian or another male adult accompany the SCC on such visits.

Objective 2: To have each SCC plan and execute a minimum of one cluster meeting for parents and/or community each month for the purpose of sharing information related to school and/or community matters. A cluster meeting is a gathering of three or more parents attending an announced/scheduled meeting.

This objective was attained.

Information was gathered from the activity logs described in the "Objective 1" section of this report. The average SCC sponsored 1.5 parent meetings per month. There was large variation among the schools; a standard deviation of 1.47 visits reflected the fact that some SCCs sponsored a considerable number of meetings while others sponsored none.

Objective 3: To have the SCC attend all faculty meetings, and discuss the coordinator program and/or community needs at least at two such meetings during the year.

This objective was partially attained.

Information gathered from the activity logs (already described) indicated that SCCs attended 90% of scheduled faculty meetings. However, an average of 11 presentations, not just the expected two, were made during the year. (Standard deviation was 1.5; i.e., in the frequency distribution, approximately the middle two thirds of the SCCs made between 9.5 and 12.5 presentations.)

Objective 4: To have the SCC assist parents in understanding and completing the application for the free and reduced-price school-lunch program when they request such service.

This objective was attained.

Two thirds of the principals, SCCs, and ACs responding to a questionnaire noted that the SCC frequently assisted parents in understanding and completing applications for free and reduced-price lunches.

Objective 5: To have the SCC attend, as the school's designated representative, a minimum of two community meetings per month.

This objective was attained.

Information gathered from the activity logs indicated that the average SCC attended 3.7 community meetings per month as the school's designated representative. (Standard deviation was 2.7; i.e., in the frequency distribution, approximately the middle two thirds of the SCCs attended between 1.0 and 6.4 community meetings.)

Objective 6: To have the SCC develop and distribute a minimum of one written communication per month to a community group.

The objective was attained.

Information gathered from the activity logs indicated that the average SCC developed 1.7 written communications per month, which were distributed to the community. There was large variation among the schools; a standard deviation of 1.5 reflected that some SCCs developed a considerable number of written communications while others developed none. Questionnaire results indicated that SCCs frequently established and published a monthly school-community newsletter.

Objective 7: To have area coordinators assist and monitor the SCCs and act as a further communication link between the school and the community, to disseminate information to the SCCs and the community.

This objective was attained.

The 12 area coordinators maintained activity logs for eight months. Data from the logs are summarized in Table 2. Each month, the average AC made 26.3 visits, attended 6.4 community and 4.1 school meetings, held 18.4 private conferences with parents, teachers, and other community persons, and was responsible for 15.4 SCCs.

Evaluator interviews with SCCs, ACs, and other project personnel revealed that ACs helped SCCs plan schedules and keep records, taught SCCs to conduct conferences, discussions, and meetings, acted as resource persons, and provided SCCs with feedback and positive reinforcement. During interviews, many experienced SCCs said that ACs' assistance in skills development was not necessary for their jobs; however, they expressed satisfaction with AC services. Newly hired SCCs said that ACs encouraged them to act decisively and purposefully and provided intensive consultative help, on-site orientation, and training to new and transferred SCCs.

SUMMARY AND CONCLUSIONS

The SCC provided a much needed service to the School District by acting as the communication link and interpreter between the school and the home. During the current school year, the 205 SCCs were assigned to 156 Title I schools. The project was fully implemented; six of its seven stated objectives were fully attained, and the other one was partially attained.

The average SCC made 78.4 home visits per month, sponsored at least 1.5 cluster meetings per month for parents, attended 90% of faculty meetings held, made an average of 11 presentations at such meetings in regard to the needs of the children and of the community, attended 3.7 community meetings per month as the school's designated representative, and developed 1.8 written communications per month to inform the community about school activities and to encourage its participation in these activities. The SCC also frequently assisted parents in understanding and completing the forms for free and reduced-price school lunches when such services were requested.

Twelve area coordinators served as guides and consultants to the SCCs in helping them to develop needed skills, and acted as a further communication link between the school and the community.

TABLE 1

PERCEPTIONS OF SCC's SERVICES TO SCHOOL

Type of Service	Percentage of Respondents Indicating SCC Renders Service					
	71 Principals		100 SCCs		12 Area Coordinators	
	Frequently	Occasionally	Frequently	Occasionally	Frequently	Occasionally
Discuss Discipline Problems	78%	18%	93%	6%	85%	8%
Discuss Attendance Problems	89	5	92	7	93	0
Discuss How Child Can Avoid Trouble	72	22	72	28	62	31
Interpret School Programs/ Activities	94	3	96	2	93	0
Listen to Parental Complaints	83	14	89	10	85	8
Arrange Conferences with Staff	89	8	72	28	93	0
Meet Parents at School	88	7	88	5	97	16
Assist Parents with Lunch Forms	68	25	61	33	70	23
Make 75 Home Visits per Month	91	7	96	3	92	0
Canvass for Kgtn. Enrollment	40	53	44	57	77	16
Report Home-Visit Results to Requester	93	4	97	0	92	0
Report Community Info. to School Staff	72	26	90	9	85	8

TABLE 1 (Continued)

PERCEPTIONS OF SCC's SERVICES TO SCHOOL

Type of Service	Percentage of Respondents Indicating SCC Renders Service					
	71 Principals		100 SCCs		12 Area Coordinators	
	Frequently	Occasionally	Frequently	Occasionally	Frequently	Occasionally
Help with School/Community Newsletter	48%	49%	65%	29%	85%	8%
Develop/Distribute Monthly Newsletter	57	38	82	11	93	0
Help to Prepare Fliers	63	35	73	75	62	32
Distribute Posters and Literature	62	35	72	27	62	31
Publicize Home/School Assoc. Meetings and Activities	90	6	91	4	85	0
Encourage Participation in Home/School Association	89	6	93	2	92	0
Help to Plan Community Meetings for School Purposes	50	45	61	34	85	0
Arrange for Resource Speakers	39	57	61	34	85	8
Help Devise Programs to Involve Parents	84	11	89	9	9[illegible]	0
Arrange Cluster Meetings for Groups of Families	68	29	82	13	93	0

TABLE 1 (Continued)

PERCEPTIONS OF SCC's SERVICES TO SCHOOL

Type of Service	Percentage of Respondents Indicating SCC Renders Service					
	71 Principals		100 SCCs		12 Area Coordinators	
	Frequently	Occasionally	Frequently	Occasionally	Frequently	Occasionally
Identify Potential Leaders among Parents	70%	24%	86%	10%	93%	0%
Arrange Meeting between Parents and School	89	41	93	4	93	0
Represent School at Two Comm. Meetings per Month	90	4	91	3	92	0
Encourage Teacher Support of Comm. Projects and Events	47	47	50	43	62	23
Attend All Faculty Meetings	86	6	85	3	93	9
Discuss School/Comm. Needs at Two Staff Meetings	78	18	81	14	93	0
Refer Families to Comm. Health Services	81	17	78	20	77	16
Get Parent Participation in Immunization Drives	65	31	60	35	93	0
Get Parents to Attend Conference with Nurse	74	22	74	21	85	8

TABLE 1 (Continued)

PERCEPTIONS OF SCC's SERVICES TO SCHOOL

Type of Service	Percentage of Respondents Indicating SCC Renders Service					
	71 Principals		100 SCCs		12 Area Coordinators	
	Frequently	Occasionally	Frequently	Occasionally	Frequently	Occasionally
Urge Parents to Accompany Children to Health Clinics	71%	23%	67%	26%	92%	0%
Get Parents to Attend Pupils' Physical Examinations	53	42	44	50	85	8
Help Arrange Explanations of Special Services	39	53	55	39	77	16
Help Arrange Parent Programs to Introduce Staff, Facilities	64	33	66	33	93	0
Advise Comm. Agencies to Assist School or Particular Families	74	23	82	17	85	8
Identify School Families Needing Special Help	93	4	94	4	93	0

TABLE 2

ACTIVITIES OF THE 12 AREA COORDINATORS IN SCC PROJECT

Activity	Monthly Average per AC									Standard Deviation
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Eight Months	
SCCs assigned to AC	15.4	15.3	15.3	15.4	16.1	16.4	15.1	14.5	15.4	2.7
SCCs visited by AC	14.1	15.1	12.7	14.9	14.9	13.6	13.5	13.6	14.1	3.5
Visits (all types) by AC	22.3	33.1	21.3	21.6	30.4	27.4	23.6	30.6	26.3	14.8
Community meetings attended	4.1	5.6	5.7	5.4	8.3	7.4	6.5	8.2	6.4	4.0
School meetings attended	3.7	3.1	2.8	3.4	3.9	4.4	4.3	7.0	4.1	2.8
Personal conferences with supervisors	2.2	3.1	1.3	1.2	2.0	1.4	1.5	1.1	1.7	1.4
Telephone confs. with supervisors	1.9	3.0	2.1	1.3	1.9	1.5	2.2	1.9	2.0	1.6
Other conferences	21.4	21.6	14.6	10.3	24.7	17.5	18.7	18.2	18.4	16.6
Talks to groups	0.9	1.8	1.4	1.1	3.0	1.4	1.3	2.1	1.6	1.9
Staff meetings	2.7	1.0	1.0	1.7	1.3	1.0	1.0	1.3	1.4	0.7

SPEECH AND HEARING

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

The Speech and Hearing project is designed to enable children with speech and hearing problems to function more effectively in the regular classroom.

RATIONALE

Many target children have speech and hearing handicaps which prevent them from achieving expected outcomes in the regular school environment. Speech and hearing defects cause learning deficiencies as well as difficulties in interpersonal communication, personality development, and social adjustment. Because family and existing school resources are not sufficient to correct these defects, a specialized therapy resource is crucial.

EXPECTED OUTCOMES

The broad goal of the project is to improve the speech and hearing of pupils who have moderate to severe handicaps.

MODE OF OPERATION

Speech and hearing therapists are responsible for providing services to a specified number of eligible schools. From each school population, the therapists select children for inclusion in their case loads using the following order of priority: (a) older and more severe cases, (b) younger children with unintelligible speech, (c) children with organic disorders such as cleft palate, hearing loss, and central nervous system disorders.

Each therapist's case load is approximately 100 children. In groups of four or five, these children meet for therapy once or twice weekly for approximately 30 minutes per session.

PREVIOUS FINDINGS

In 1969-1970 and 1970-1971, evaluations were conducted by the Coordinator of Nonpublic School Projects. Evaluations by the Office of Research and Evaluation began with the 1971-1972 school year.

In 1971-1972 and 1972-1973, pretest and posttest scores on the Templin-Darley Screening Test of Articulation provided data which suggested that the project was successful in correcting the articulatory speech defects of participating children.

In 1971-1972, 1,111 children were treated in a total of 20,175 therapy sessions. As a result of therapy, 14% of the defective articulation cases were corrected and 4% were dismissed as improved; 12% of the stuttering cases were corrected.

In 1972-1973, 1,251 children were treated in a total of 25,753 therapy sessions. As a result of therapy, 23% of the defective articulation cases were corrected and 5% were dismissed as improved; 22% of the stuttering cases were corrected.

In 1973-1974, 1,152 children were treated in a total of 18,380 therapy sessions. As a result of therapy 30% of the defective articulation cases were corrected and 6% were dismissed as improved; 23% of the stuttering cases were corrected. Pretest and posttest scores on the Templin-Darley Diagnostic Test confirmed the project's continued success in correcting articulatory speech defects.

THE 1974-1975 EVALUATION

In general, the current year's evaluation of the Speech and Hearing project examined the same aspects of the project as previous evaluations.

IMPLEMENTATION

The project's intended mode of operation was partially implemented. Eight speech therapists and one hearing therapist were scheduled to serve project pupils during the school year. One speech therapist resigned in December; the hearing therapist resigned prior to the beginning of the school year. Satisfactory replacements were not found. Consequently, pupils did not receive the intended amount of therapy.

The services provided by the seven speech therapists to pupils with defective articulation are summarized in Table 1. Services to pupils who stutter are summarized in Table 2. The case loads of the seven speech therapists, including carry-overs from last year, totaled 1,023 defective articulation pupils and 71 stuttering pupils. Of the 1,023 defective articulation pupils, 970 received 17,234 treatment sessions, an average of 17.8 sessions per pupil. Of the 71 stuttering pupils, 67 received 1,094 treatment sessions, an average of 16.3 sessions per pupil.

ATTAINMENT OF OBJECTIVES

Objective 1: To correct the defective sounds of the project children to the extent evidenced by a statistically significant difference in mean pretest and posttest scores on the Templin-Darley Diagnostic Test of Articulation.

This objective was attained.

The Templin-Darley Diagnostic Test of Articulation was administered twice to a stratified random sample of all project pupils receiving articulation therapy. The sample of 207 pupils included 20% of the total case load. The test was individually administered by the therapists in October and May. Results are shown in Table 3.

A t test for correlated samples was applied to determine the statistical significance of the difference between mean pretest and posttest scores. Gains for each therapist's sample and combined sample gains were found to be statistically significant at the .05 level (alpha adjusted to .025 for multiple comparisons using the same subjects).

Objective 2: To decrease the severity and/or incidences of stuttering behaviors of all children receiving therapy for stuttering, as indicated by therapists' ratings of "improved" for 70% of the stuttering cases.

This objective was attained.

Each therapist rated her stuttering pupils on the project's Stuttering Evaluation form at the conclusion of the current school year, using ratings of "improved", "remained the same", or "regressed". The therapists' ratings for the 71 stuttering pupils are summarized in Table 4. Fifty-nine (83%) of the pupils were rated "improved".

Objective 3: To dismiss as corrected 20% of the children with defective sounds and 15% of the stuttering children.

This objective was attained.

Each therapist rated her defective articulation pupils using the project's Defective Articulation Summary form, and her stuttering pupils using the project's Stuttering Evaluation form. Possible ratings were "corrected", "dismissed improved", "drop", and "continue". All 1,023 defective articulation pupils and 71 stuttering pupils were rated.

Individual therapists' ratings for defective articulation pupils are summarized in Table 5; ratings for stuttering pupils are summarized in Table 6. The 26% correction rate for defective sounds exceeded the 20% criterion; the 28% correction rate for stuttering exceeded the 15% criterion.

Objective 4: To improve the general intelligibility of the project children's connected speech patterns, as indicated for 65% of the children by "improved" ratings comparing the October and April recordings of the children's speech.

This objective was attained.

The pretest-posttest evaluation design was modified, a test of significance replaced the 65% criterion of success. One-minute tape recordings of each pupil's conversational speech were made in October and May. A picture provided the stimulus for the child to speak, and the therapist provided encouragement through questions or directions.

A panel of four speech therapists and the project coordinator listened to the pretherapy recordings and assigned each a numerical rating on a five-point scale. Tapes receiving the same ratings from all panel members were later used as standards representing the five points on the scale.

A panel of three speech therapists not involved in the scaling process repeatedly listened to the five tapes selected as standards, in order to understand the differences between contiguous scale ratings. Then all pretherapy and posttherapy tapes were played, and the panel assigned ratings to each.

This procedure replaced the initial design because the use of standards for comparison provided greater accuracy than relying on panelists' individual perceptions to classify pupils' speech problems as "profound", "severe", "moderate", "mild", or "minor".

A total of 61 pupils were selected randomly for taping; after elimination of some tapes because of technical problems and the loss of some pupils from the sample because of their moving or their therapist's December resignation, 42 pupils' October and May tapes were analyzed. In a t test for correlated samples, the superiority of the mean rating of the May tapes (4.1) over that of the October tapes (3.8) was found to be statistically significant at the .01 level. Thus the general intelligibility aspects of children's connected speech was found to have improved during the therapy.

Objective 5: To improve the auditory skills, and lipreading skills, as needed, of the hearing-handicapped children, as indicated by therapist ratings in case-study analysis of each child.

This objective was not applicable to the current year's evaluation because the hearing specialist resigned before the school year began, and a suitable replacement was not found.

SUMMARY AND CONCLUSIONS

The Speech and Hearing project was created to improve the speech and hearing of pupils with moderate to severe handicaps which cause learning deficiencies and difficulties in interpersonal communication, personality development, and social adjustment.

During 1974-1975, the project was partially implemented according to the intended mode of operation (not fully staffed) and continued to exhibit success. Pretest-to-posttest comparisons, rating scales, and tape recordings of pupil speech provided data indicating that all but one of the project's stated objectives were attained. Defective sounds and stuttering of children receiving therapy decreased, expected proportions of defectively articulating and stuttering pupils were dismissed as corrected, and the general intelligibility of participating pupils' connected speech patterns improved. Improvement of auditory skills could not be determined because the project had no hearing specialist this year.

Continued project success and increasing numbers of Title I children requiring speech and hearing therapy suggest future expansion of project services.

TABLE 1

SPEECH-AND-HEARING PROJECT SERVICES PROVIDED TO DEFECTIVE ARTICULATION PUPILS

Therapist	Case Load Including Carryovers from Last Year	Pupils Dismissed Corrected without Further Treatment	Carryovers Untreated for Other Reasons[1]	Pupils Treated during Current Year	Total Treatment Sessions	Average Treatment Sessions per Pupil
A	151	7	3	141	2,494	17.7
B	174	0	0	174	3,818	22.0
C	95	8	0	87	1,839	21.1
D	124	4	1	119	2,224	18.7
E	198	20	7	171	2,234	13.1
F	127	0	0	127	2,057	16.2
G	154	1	2	151	2,568	17.0
Seven Therapists[2]	1,023	40	13	970	17,234	17.8

[1] Category may include pupils who moved, transferred, graduated, or were dismissed improved.

[2] The table omits services provided by an eighth therapist who voluntarily resigned in December.

TABLE 2

SPEECH-AND-HEARING PROJECT SERVICES PROVIDED TO STUTTERING PUPILS

Therapist	Case Load Including Carryovers from Last Year	Pupils Dismissed Corrected without Further Treatment	Pupils Treated during Current Year	Total Treatment Sessions	Average Treatment Sessions per Pupil
A	9	0	9	117	13.0
B	5	0	5	82	16.4
C	11	1	10	192	19.2
D	19	3	16	276	17.3
E	2	0	2	14	7.0
F	17	0	17	255	15.0
G	8	0	8	158	19.8
Seven Therapists[1]	71	4	67	1,094	16.3

[1] The table omits services provided by an eighth therapist who voluntarily resigned in December.

TABLE 3

GAINS ON TEMPLIN-DARLEY DIAGNOSTIC TEST OF ARTICULATION BY SPEECH-AND-HEARING PROJECT PUPILS

Therapist	Assigned Case Load	Cases Sampled	Pretest Mean Score	Posttest Mean Score	Gain
A	151	31	150.6	165.9	15.3*
B	174	30	143.9	164.8	20.9*
C	95	23	133.3	147.7	14.4*
D	124	22	138.9	155.9	17.0*
E	198	35	145.6	156.6	11.0*
F	127	33	146.9	163.5	16.6*
G	154	33	133.8	165.5	31.7*
Seven Therapists[1]	1,023	207	142.3	160.6	18.3*

*Significant beyond the .05 level.

[1] The table omits services provided by an eighth therapist who voluntarily resigned in December.

TABLE 4

PROGRESS BY STUTTERING PUPILS
IN SPEECH-AND-HEARING PROJECT

Therapist	Case Load Including Carryovers from Last Year	Pupils Who Improved	Pupils Who Remained the Same	Pupils Who Regressed	Pupils Not Rated
A	9	9	0	0	0
B	5	2	3	0	0
C	11	7	3	1	0
D	19	16	3	0	0
E	2	2	0	0	0
F	17	17	0	0	0
G	8	6	2	0	0
Seven Therapists[1]	71 (100%)	59 (83%)	11 (16%)	1 (1%)	0 (0%)

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[1] The table omits services provided by an eighth therapist who voluntarily resigned in December.

TABLE 5

CORRECTION OF DEFECTIVE ARTICULATION IN SPEECH-AND-HEARING PROJECT

Therapist	Case Load Including Carryovers from Last Year	Pupils Dismissed Corrected	Pupils Dismissed Improved	Pupils Dropped for Extraneous Reasons	Pupils Continued to Next Year
A	151	40	4	9	98
B	174	30	5	15	124
C	95	36	0	6	53
D	124	34	3	10	77
E	198	39	9	15	135
F	127	37	8	5	77
G	154	49	10	14	81
Seven Therapists[1]	1,023 (100%)	265 (26%)	39 (4%)	74 (7%)	645 (63%)

[1] The table omits services provided by an eighth therapist who voluntarily resigned in December.

TABLE 6

CORRECTION OF STUTTERING IN SPEECH-AND-HEARING PROJECT

Therapist	Case Load Including Carryovers from Last Year	Pupils Dismissed Corrected	Pupils Dropped for Extraneous Reasons	Pupils Continued to Next Year
A	9	2	0	7
B	5	0	0	5
C	11	2	0	9
D	19	5	3	11
E	2	2	0	0
F	17	7	4	6
G	8	2	0	6
Seven Therapists[1]	71 (100%)	20 (28%)	7 (10%)	44 (62%)

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[1] The table omits services provided by an eighth therapist who voluntarily resigned in December.

SPEECH-THERAPY CLINICS

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

The Speech-Therapy Clinics project serves target children with speech problems who are not eligible to receive the services of the Speech and Hearing project. Those children requiring speech therapy who attend schools not involved directly with the Speech and Hearing project receive the services of the therapists in clinics on Saturday mornings.

RATIONALE

Some target children manifest speech defects which may result in low academic achievement, physical and psychological withdrawal, or interpersonal noncommunication. Because family and existing school resources are not sufficient to correct the speech defects, special therapy is crucial.

EXPECTED OUTCOMES

The primary goal of the project is to correct the speech defects of the participating children through individual and group therapy and parental consultation.

MODE OF OPERATION

Seven clinics, each staffed by a qualified speech therapist, provide Saturday morning therapy programs in locations throughout the city. The program in each clinic follows a general plan: three one-hour periods between 9 a.m. and 12 noon for homogeneous groups of four students each, one half-hour period from 12 until 12:30 for individual therapy, one half-hour clinical period from 12:30 until 1 p.m., and parent consultations during each period.

A consulting therapist screens applications forwarded from the schools, examines the applicants, and consults with the parents. A list of eligible children is compiled and utilized in filling each clinic.

PREVIOUS FINDINGS

In the 1968-1969 school year, 82 cases were treated for defective articulation and 20 corrections were made. Fifty-five children required more extensive therapy. The average improvement on the Templin-Darley Screening Test was 11 points.

In 1969-1970, the evaluation was conducted by the project director; her report is available from the Coordinator of Nonpublic School Projects. In 1970-1971, 135 children received a total of 2,252 therapy sessions for an average of 16.7 sessions per child.

In 1971-1972, 115 children received a total of 1,817 therapy sessions. Twenty-seven defective articulation cases and three stuttering cases were corrected, and five defective articulation cases were dismissed as improved. The average improvement on the Templin-Darley test was 10.8 points. In 1972-1973, 86 children received an average of 16 therapy sessions. Seven of the 10 stuttering cases were rated as improved; 18 of the 76 defective articulation cases and four of the 10 stuttering cases were rated as corrected. The average improvement on the Templin-Darley test was 10.5 points.

In 1973-1974, 98 defective articulation and eight stuttering cases (including carry-overs from the preceding year) received the services of the nine clinics. Five of the carried-over pupils were dismissed as corrected without further treatment. Seven of the eight stuttering cases were rated as improved; the eighth case was a carry-over who was dismissed as corrected. Thirty-eight of the 98 defective articulation cases were dismissed as corrected. The average improvement on the Templin-Darley test was 10.8 points.

THE 1974-1975 EVALUATION

The current year's evaluation of the Speech-Therapy Clinics examined the same aspects of the project as previous evaluations.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. Services provided by the project are summarized in Table 1. The combined case loads at the nine clinics, including carryovers from 1973-1974, totaled 92 defective articulation and 11 stuttering pupils.

ATTAINMENT OF OBJECTIVES

Objective 1: To correct the defective sounds of the project children to the extent evidenced by a statistically significant difference in mean pretest and posttest scores on the Templin-Darley Screening Test of Articulation.

This objective was attained.

The Templin-Darley Screening Test of Articulation was individually administered to all project children by clinic therapists in October 1974 and May 1975. Pretest and posttest mean scores were compared using a t test for correlated samples.

Results for 68 pupils are summarized in Table 2. The gain of eight points between pretest and posttest was statistically significant at the .05 level.

Objective 2: To decrease the severity and/or incidences of stuttering behaviors of all children receiving therapy for stuttering, as indicated by a therapist rating of "improved" for 20% of the cases.

This objective was attained.

Using the project's Stuttering Evaluation form, each clinic therapist subjectively rated her stuttering pupils as "improved", "remained the same", or "regressed" at the conclusion of the school year. Progress by the 11 pupils receiving therapy for stuttering is summarized in Table 3. Although the number of cases was small, the 73% improvement rate far exceeded the 20% criterion.

Objective 3: To dismiss as corrected 15% of the defective articulation cases and 5% of the stuttering cases.

This objective was partially attained. The defective articulation criterion was exceeded; the stuttering criterion was not met.

Each clinic therapist used the project's Defective Articulation Summary form to rate her defective articulation pupils, and the project's Stuttering Evaluation form to rate her stuttering pupils. Ninety-two defective articulation and 11 stuttering pupils were rated as "corrected", "dismissed improved", "drop", or "continue".

The ratings are summarized in Table 4. The combined ratings from all clinic therapists indicated that 17 defective articulation pupils (18%) were "corrected". However, no stuttering pupils were rated "corrected".

SUMMARY AND CONCLUSIONS

The Speech-Therapy Clinics project was created to serve Title I children with moderate to severe defects who were not eligible for the Speech and Hearing project. Participating children were served on Saturday mornings to correct defects which might affect academic performance, self-concept, and interpersonal communication.

The project was implemented according to the intended mode of operation and fully or partially attained each stated objective. Participating pupils' defective articulation and stuttering were decreased and/or corrected.

TABLE 1

SERVICES PROVIDED BY SPEECH-THERAPY CLINICS TO DEFECTIVE ARTICULATION (DA) AND STUTTERING (ST) PUPILS

Type of Speech Defect	Combined Case Loads Including Carryovers from Last Year	Pupils Dismissed Corrected without Further Treatment	Pupils Treated during Current Year	Total Treatment Sessions	Average Treatment Sessions per Pupil
DA	92	0	92	1,411	15.3
ST	11	0	11	163	14.8

TABLE 2

GAIN ON TEMPLIN-DARLEY SCREENING TEST OF ARTICULATION BY PUPILS IN SPEECH-THERAPY CLINICS

Combined Case Loads	Cases Sampled	Pretest Mean Score	Posttest Mean Score	Mean Gain
92	68	31.7	39.8	8.1*

*Significant beyond the .05 level.

TABLE 3

PROGRESS BY STUTTERING PUPILS IN SPEECH-THERAPY CLINICS

Combined Case Loads Including Carryovers from Last Year	Pupils Who Improved	Pupils Who Remained the Same	Pupils Who Regressed
11	8	3	0

TABLE 4

CORRECTION OF DEFECTIVE ARTICULATION (DA) AND STUTTERING (ST) IN SPEECH-THERAPY CLINICS

Type of Speech Defect	Combined Case Loads Including Carryovers from Last Year	Pupils Dismissed Corrected	Pupils Dismissed Improved	Pupils Dropped for Extraneous Reasons	Pupils Continued to Next Year
DA	92 (100%)	17 (18%)	7	20	48
ST	11 (100%)	0 (0%)	0	3	8

SUMMER SPECIAL EDUCATION

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

The Summer Special Education project provides instruction and therapy services for emotionally disturbed, visually handicapped, retarded trainable, hearing-handicapped, and orthopedically handicapped students, and job-coordinator service for retarded educable students.

RATIONALE

The Summer Special Education project extends the instructional and therapeutic services offered during the regular school year. Continuity and consistency throughout the year is necessary to meet the needs of the students served by the project: (a) emotionally disturbed children require extensive support and direction within a structured, stable learning environment in order to make the socioemotional adjustments necessary for learning; (b) visually handicapped students need a year-round program in order to acquire a large number of special skills, such as orientation and mobility training, in addition to academic proficiency; (c) retarded trainable children need constant reinforcement for the maintenance of acquired training and vocational skills; (d) hearing-handicapped students have concomitant language handicaps which must be systematically met throughout the year in order to avoid regression of communication skills, (e) orthopedically handicapped students need to maintain their prescriptive therapy programs on a full-time basis; and (f) employed retarded educable students need the continuous support and services provided by the job coordinator in making the personal and social adjustments necessary for successful year-round employment.

Many of the participating students have a limited background of experiences. The Summer Special Education project provides an opportunity for them to participate in field trips and other enrichment activities not included in their regular school programs.

EXPECTED OUTCOMES

It is expected that the reinforcement and enrichment experiences which the summer project provides will increase the scope of the regular school-year curriculum and reduce the summer regression that would otherwise occur.

MODE OF OPERATION

Summer Special Education programs are conducted by special education teachers and a job coordinator who are also in contact with the project's students during the regular school year. The project intends for 875 public and 15 private school students (a) to continue their regular school programs, (b) to participate in enrichment activities where possible, and/or (c) to have their regular school-year classroom training and counseling extended to their places of employment in the summer project. Eighty students at the Logan School for the visually handicapped, 70 students at the Martin School for hearing-handicapped, 250 retarded trainable students at the Muhr, Brooks, Bartlett, and Spruance Work Training Schools, and 200 orthopedically handicapped students at the Widener Memorial School continue their regular school programs in the summer project in order to extend their competency levels.

The job coordinator makes citywide, on-site visits to the 260 employed retarded educable students and their employers, to ensure satisfactory work relationships, identify available entry-level jobs for placement during the regular and summer programs, and prepare reports about students' wages, productivity, and adjustment to assigned tasks.

PREVIOUS FINDINGS

Descriptive evaluations by the project director, classroom observations, and teacher reports based on individual checklists for students indicated that school services available during the regular year were also provided in the summer project, and that some enrichment activities also were provided.

Of the 331 pupils participating in the 1974 project's academic programs, 43% were rated as improved, and 57% maintained their achievement levels; one student was reported to have regressed. Of the 150 students who participated in vocational training in 1974, 41% improved their vocational skills, and 59% maintained their levels of achievement; one student regressed. Of the 362 students enrolled in all instructional programs, 43% improved in social skills, 55% maintained their levels, and 2% regressed. The 176 students placed in work situations earned an average of $570 during the 1974 summer program.

Average daily attendance for the Summer Special Education programs ranged between 79% and 90%.

THE 1974-1975 EVALUATION

The evaluation of the 1975 Summer Special Education project examined the activities of the job coordinator and assessed both the project's services and the students' progress.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. Information on the project's instructional programs--enrollment, number of classes, days and hours of class operation, and average daily attendance--is shown in Table 1. In total, 525 students were enrolled in the project's instructional programs; average daily attendance ranged from 80% to 94%.

The evaluation team surveyed all participating centers, and found that the Widener, Martin, and Logan Schools, and several classes for the emotionally disturbed, included enrichment activities in their programs. These classes took field trips to places of interest in Philadelphia such as the U.S. Mint, Franklin Institute, and International Airport. Programs for visually handicapped, hearing-handicapped, orthopedically handicapped, and emotionally disturbed students included social activities such as picnics and outdoor play days. Teachers of classes for the emotionally disturbed reported increased flexibility in their summer programs, to allow students to pursue personal interests not covered during the regular term.

Several summer programs evaluated and oriented students who had not participated in programs during the regular school year. Widener School operated a kindergarten-level orientation and evaluation class for 21 children applying for admittance. The staff conducted observations of learning behaviors exhibited during the summer, and considered the evaluations of a physical therapist. In this way, they were able to assess each child's potential to benefit from the regular program, and on the basis of summer performance, 20 of the 21 children were approved for admission to Widener's kindergarten.

Visually handicapped children who were enrolled in Logan School's regular-term itinerant program attended the school for the summer session. This gave the staff an opportunity to reassess these students' needs.

Many retarded trainable students who had no previous vocational training participated in summer assembly and packaging workshops. This allowed teachers to assess their potential for further training in these areas.

ATTAINMENT OF OBJECTIVES

Objective 1: To have orthopedically handicapped students maintain or improve their (a) academic skills, (b) social skills, and (c) physiological rehabilitation.

This objective was attained.

Teachers used the evaluator-developed individual student report forms for each program to assess academic and social skills. Teachers indicated whether the student improved, showed no change, or regressed in achievement level for each applicable skill. Because many students required individualized instruction, they were not necessarily rated in all skill areas. Forms for the orthopedically handicapped also ascertained availability of physiological therapy and progress assessment.

Teacher ratings of student progress in academic skills is summarized in Table 2. Of the 128 orthopedically handicapped students rated in reading, 33 (26%) improved and 95 (74%) maintained their levels. Of the 127 orthopedically handicapped students rated in mathematics, 20 (16%) improved and 107 (84%) maintained their levels.

The evaluation team developed a form used in 30 classroom observations. Classroom activities were identified by skill area. Information on the type and number of activities observed in each program is shown in Table 3. The evaluation team visited six classrooms for the orthopedically handicapped and observed eight activities, all of which were concerned with academic skill development.

Student progress ratings in social skills are summarized in Table 4. Of 107 orthopedically handicapped students, 40 (37%) improved and 65 (60%) maintained their levels.

Of the 158 orthopedically handicapped students at the Widener School, 120 received physiological therapy. The program included physical, functional, and occupational therapy, swimming, and perceptual-motor training. Eighty-one students participated in more than one form of therapy.

A summary report prepared by the therapists revealed that 1,869 physical and occupational therapy treatments were given during the summer program. Assessments of student progress in physiological rehabilitation are summarized by type of therapy in Table 5. Of the 183 students rated, 61 (33%) improved and 122 (67%) maintained their levels.

Objective 2: To have visually handicapped, hearing-handicapped, and emotionally disturbed students maintain or improve their (a) academic skills, (b) social skills, and (c) vocational skills.

This objective was attained. The vocational skills component was not applicable to the current year's evaluation because Martin and Logan Schools did not include vocational programs in their summer schedule. Summer programs for the visually handicapped, hearing-handicapped, and emotionally disturbed students focused on the development of basic skills.

Evaluation procedures described under Objective 1 were used to assess academic skills and social development. Teacher ratings of students' academic progress are shown in Table 2. Of 214 visually handicapped, hearing-handicapped, and emotionally disturbed students rated in reading skills, 148 (69%) improved and 64 (29%) maintained their levels. Of the 215 students rated in mathematics, 139 (65%) improved and 76 (35%) maintained their levels.

The evaluation team visited 20 classrooms for the visually handicapped, hearing-handicapped, and emotionally disturbed; observation results are shown in Table 3. Twenty-eight of the 34 observed activities were concerned with academic skill development, and five dealt with social skills.

Of the 201 students in these programs rated in social skills, 158 (79%) improved and 35 (17%) maintained their levels, as shown in Table 4. Eight of the 79 emotionally disturbed students regressed.

Objective 3: To have retarded trainable students maintain or improve their (a) vocational skills and (b) social skills.

This objective was attained.

Evaluation procedures described for Objective 1 were used also to assess vocational skills and social development.

Teacher progress reports showed that of 140 retarded trainable students rated in vocational skills, 40 (29%) improved and 97 (69%) maintained their levels. The evaluators visited the four assembly and packaging workshops, where they observed students performing 17 job tasks.

Of the 115 students rated in social skills, 17 (15%) improved and 96 (83%) maintained their levels, as shown in Table 4.

Objective 4: To have retarded educable and retarded trainable students in the work training program maintain their work relationships as a result of the job coordinator's monitoring them at their job sites and advising or counseling them regarding job-related problems.

This objective was attained.

An activity log was developed by the evaluation team for use by the summer job coordinator. Weekly numerical summaries of activities, such as job-site visits to student workers and contacts with employers, were recorded on the log. The job coordinator kept the log during a six-week period.

Because of a heavy case load and the program's limited time frame, the coordinator increased the number of telephone contacts made for initial screening. This resulted in a 54% increase over the preceding summer's total number of employer contacts. In addition to increasing employer contacts, the revised work approach enabled the coordinator to more effectively use time allotted for personal contacts.

In June 1975, 226 students were reported employed. The summer job coordinator made 138 visits to their job sites, and telephone verifications of student employment raised the number of employer contacts to 284. The summer coordinator reported that 184 (81%) of the 226 students maintained their employment throughout the summer session.

A member of the evaluation team accompanied the coordinator during a day's activities. At each job site, the coordinator verified the students' employment and discussed the work situation with the employer. Where possible, the coordinator spoke briefly with students to ascertain if they had any problems or questions.

In addition to maintaining employer and employee contact throughout the summer, the coordinator completed a report on each employed student, to be used during the school year by the regularly assigned coordinator. The report included total wages earned, taxes paid, and comments on the student's job performance. By providing continuous records on the students, the summer reports contributed to effective job training by the regularly assigned coordinator.

SUMMARY AND CONCLUSIONS

The Summer Special Education project extends the instructional and therapeutic services that are offered to emotionally disturbed, hearing-handicapped, retarded trainable, orthopedically handicapped, and visually handicapped students during the regular school year. Enrichment activities expand the scope of the regular school-year curriculum. A summer job coordinator provides continuity by observing and counseling retarded educable and trainable student workers during the summer months.

The current year's evaluation focused on the implementation of project services and students' progress.

The project's intended mode of operation was fully implemented. A total of 525 students in 40 classes for the emotionally disturbed, hearing-handicapped, retarded trainable, orthopedically handicapped, and visually handicapped participated in academic and vocational programs. With the exception of the vocational training workshops, enrichment activities were included in all programs.

All instructional programs successfully attained objectives for students to maintain or improve their skills. Progress reports indicated that at least 97% of the students in the project's instructional programs improved or maintained their levels in academic, social, and vocational skills, and in physiological therapy.

With the services of the citywide job coordinator, the objective of maintaining student employment throughout the summer was attained. Of 226 retarded educable and trainable students employed in June, 184 (81%) continued their employment throughout the summer.

TABLE 1

IMPLEMENTATION OF INSTRUCTIONAL PROGRAMS IN SUMMER SPECIAL EDUCATION

Instructional Program	Enrollment	Classes Operational	Days Operational	Hours per Day	Average Daily Attendance
Emotionally Disturbed	79	10	28	3	89%
Hearing-Handicapped	63	7	20	3 1/4	94%
Retarded Trainable	147	4	20	3	90%
Orthopedically Handicapped	158	14	15	5 3/4	80%
Visually Handicapped	78	5	20	3	91%
Total	525	40	--	--	--

TABLE 2

SUMMARY OF SUMMER-SPECIAL-EDUCATION TEACHERS' RATINGS OF STUDENT PROGRESS IN ACADEMIC SKILLS

Instructional Program	Reading				Mathematics			
	No. of Students Rated	Students Rated Improved	Students Rated Same	Students Rated Regressed	No. of Students Rated	Students Rated Improved	Students Rated Same	Students Rated Regressed
Emotionally Disturbed	74	35	37	2	76	35	41	0
Hearing-Handicapped	63	53	10	0	62	43	19	0
Orthopedically Handicapped	128	33	95	0	127	20	107	0
Visually Handicapped	77	60	17	0	77	61	16	0
Total	342	181	159	2	342	159	183	0

TABLE 3

ACTIVITIES OBSERVED IN SUMMER-SPECIAL-EDUCATION CLASSROOMS

Instructional Program	Classroom Visits	Activities Observed					
		Total	Academic Skill Development	Vocational Skill Development	Social Skill Development	Physiological Therapy*	Other
Emotionally Disturbed	8	15	12	1	2	-	0
Hearing-Handicapped	7	12	10	0	2	-	0
Retarded Trainable	4	17	0	17	0	-	0
Orthopedically Handicapped	6	8	8	0	0	-	0
Visually Handicapped	5	7	6	0	1	-	0
Total	30	59	36	18	5	-	0

*Physiological therapy occurred outside the classrooms which were observed by the evaluation team.

TABLE 4

SUMMARY OF SUMMER-SPECIAL-EDUCATION TEACHERS' RATINGS OF STUDENT PROGRESS IN SOCIAL SKILLS

Instructional Program	No. of Students Rated	Students Rated Improved	Students Rated Same	Students Rated Regressed
Emotionally Disturbed	79	50	21	8
Hearing-Handicapped	45	44	1	0
Retarded Trainable	115	17	96	2
Orthopedically Handicapped	107	40	65	2
Visually Handicapped	77	64	13	0
Total	423	215	196	12

TABLE 5

SUMMARY OF SUMMER-SPECIAL-EDUCATION TEACHERS' RATINGS OF STUDENT PROGRESS IN PHYSIOLOGICAL REHABILITATION

Type of Therapy	No. of Students Rated	Students Rated Improved	Students Rated Same	Students Rated Regressed
Physical Therapy	77	22	55	0
Occupational Therapy	68	21	47	0
Functional Therapy	9	4	5	0
Swimming	21	11	10	0
Perceptual-Motor Training	8	3	5	0
Total	183	61	122	0

WALNUT CENTER

Readers who are cognizant of this project's previous evaluations are invited to turn directly to the section of this report entitled THE 1974-1975 EVALUATION.

Walnut Center is an early childhood educational center which provides programs for preschool, kindergarten, and first-grade children and an after-school child-care and enrichment program for school-age children. The children are screened and selected to provide a mix of socioeconomic and ethnic characteristics.

RATIONALE

Walnut Center serves children and parents from a wide variety of ethnic and socioeconomic backgrounds. In this environment, the project addresses the community's need for a model school in which pupils' cognitive skills can be developed through discovery and experience and in which their physical, social, and emotional growth can be fostered. The center also serves as a child-care and enrichment center for school-age children who attend neighborhood schools.

EXPECTED OUTCOMES

It is expected that through the project's readiness experiences, preschool children will be well prepared for first grade. It is also expected that when the children are in first grade they will continue to develop physically, socially, and emotionally, and that basic reading, writing, mathematics, science, and social studies skills also will be developed. By the end of first grade, children are expected to reach levels of basic skill development which are equivalent to national norms.

MODE OF OPERATION

Walnut Center offers the community a primary school program and a child-care program. The primary school program provides services for two half-day preschool classes of three- and four-year-olds, two half-day kindergarten classes, and two first-grade classes, Monday through Friday during the regular school year.

The child-care program is organized to provide full-day care for two pre-kindergarten and two kindergarten classes. Two groups of school-age children attending other elementary schools come to WC before school, during lunch, and after school. Children enrolled in the child-care program receive meals, snacks, and a planned program of educational and recreational activities.

Through an individualized instructional approach, the staff is aware of each child's abilities. A program to foster muscular development, proper nutrition, and early detection and correction of health problems is coupled with class activities directed toward the development of social and emotional growth within a group situation. Exploration, discovery, experimentation, and reinforcement of experience in an open-classroom setting motivate each child to develop his abilities. Teachers use a wide range of methods, materials, and equipment to encourage and expand learning experiences. Trips to various cultural, environmental, and educational sites are a vital aspect of this eclectic approach.

Active project participation by parents, community volunteers, student teachers, and high school volunteers increases the classroom adult/pupil ratio and enhances individualized instruction. A parent/staff team (including the school nurse, social workers, the home and school coordinator, secretaries, the custodian, teachers, and aides) helps to provide the analysis, planning, and program to foster the child's total growth.

Seminars, lectures, and workshops keep the staff, community volunteers, parents, and pupils informed of current educational trends. Methods and procedures are constantly reevaluated. Staff meetings are used to evaluate the individual pupil's growth and development and to determine the best approach for helping each child to reach his potential.

PREVIOUS FINDINGS

Past evaluations indicated that WC's goals in both cognitive and social areas have consistently been achieved. In 1968-1969, WC pupils equaled or excelled nonparticipant peers on standardized tests of cognitive skill development.

In 1969-1970, it was found that many persons from the community, particularly parents, were actively involved in WC. A high degree of interaction was observed among pupils from different backgrounds. A follow-up of WC children showed that they were better able than nonparticipants to adjust to second-grade classes in their new schools.

In 1970-1971 it was found that WC pupils in both kindergarten and first grade scored above national reading and arithmetic averages on the Philadelphia Readiness Test and on Continuous Progress Primary (CPP) criterion measures. In almost all cases, upper socioeconomic WC pupils scored higher than their lower socioeconomic WC peers. However, the lower socioeconomic WC pupils tended to obtain academic ratings higher than those for the city as a whole. Attitudes of WC pupils toward school were quite positive, regardless of pupils' socioeconomic backgrounds.

In 1971-1972, WC pupils achieved the set criterion: by April 1972, 95% of WC first-grade pupils attained at least CPP Level 3 in reading; 91% did so in arithmetic; 85% did so in both areas. Also, 85% of the WC first-grade pupils achieved at least Level 4 in reading.

In 1973-1974, WC pupils' achievement on standardized tests exceeded the objectives set for both preschool children and first graders. The center continued to serve as an effective model of early childhood urban education.

THE 1974-1975 EVALUATION

The current year's evaluation of the Walnut Center project was based on observations, informal interviews, and pupil scores on a nationally normed achievement test.

IMPLEMENTATION

The project's intended mode of operation was fully implemented. During the school year, Walnut Center continued to provide a primary educational program for two half-day preschool classes of three- and four-year-olds, two half-day kindergarten classes, and two first-grade classes. The child-care program provided full-day service for two prekindergarten and two kindergarten classes. In addition, two groups of pupils attending neighborhood elementary schools came to WC before school, during lunch, and after school. Children enrolled in the child-care program received a hot lunch prepared on site, snacks, and a planned program of educational and recreational activities.

Kindergarten and first-grade classes were taught in the open classroom mode, mostly with small-group or individualized instruction. The adult/pupil ratio was high due to the number of teacher aides, student interns, and parent volunteers. Children assisting one another were also observed by the evaluator.

All observed classrooms were organized into large and small spaces equipped with varied academic and interest-area materials. Classrooms also had an assortment of audiovisual aids and curricular materials. Teachers and children worked together to create many classroom exhibits including plants, animals, maps, photographs, drawings, and creative writings. Exemplary activities included a music class for preschoolers involving rhythmic movements to music following the Orff technique. Bus and walking trips were an integral part of the instructional program, and follow-up activities were carefully planned for reinforcement.

The project staff maintained awareness of pupils' needs and growth. The entire staff, including nonteaching personnel, participated in meetings to plan the best approach for each pupil's growth and development.

One of the center's unique features was the racial and socieconomic composition of its student body. During the 1974-1975 school year, the racial mix was 62.8% black, 0.5% Hispanic, and 36.7% other. Parents of WC pupils represented the full range of socioeconomic levels.

ATTAINMENT OF OBJECTIVES

Objective 1: Kindergarten children will develop readiness skills in reading and arithmetic, to the extent that the distribution of their Stanford Early School Achievement Tests (SESAT) scores will equal national norms.

This objective was attained.

Administration of the SESAT in February 1975 gave midyear scores which were not directly comparable with national end-of-year norms. However, examination of national percentile ranks on the reading and mathematics parts of the test indicated that a majority of the 63 Walnut Center kindergarten pupils scored at or above the 50th percentile (84% in Letters and Sounds, 67% in Aural Comprehension, and 67% in Mathematics). The distribution of their scores is summarized in Table 1.

Objective 2: First-grade children will develop basic skills in reading and arithmetic, to the extent that the distribution of their California Achievement Tests (CAT) scores will equal national norms.

This objective was fully attained.

The California Achievement Tests (CAT Level 1, Form A) were administered in February 1975 to both first-grade classes at the center (49 pupils). The 50% criterion was exceeded; 96% of the first-grade children were above the national 50th percentile in both Total Reading and Total Mathematics scores.

For each section of the test, raw scores were averaged and converted into grade equivalents and corresponding national percentile ranks. Reading results are shown in Table 2 and mathematics results in Table 3.

Objective 3: The center will provide medical, psychological, psychiatric, speech, and social service professional care as needed.

This objective was fully attained.

The center provided a complete medical and psychological program. The full-time nurse organized the Public Health immunization program, talked to parents, screened all children, and conducted complete medical interviews with all entering pupils. In addition, she helped coordinate weekly the doctor's visits and pupils' annual dental check-ups, and maintained pupil health records and first-aid services. The medical and dental services were available to all Walnut Center pupils.

The services of a psychiatrist and a psychologist were available and utilized during the school year. The psychiatrist dealt with 10 children throughout the year, and the psychologist screened six children for early admissions, three for problems, and 12 for placement as academically talented. A social service worker interviewed all entering pupils and their parents, provided behavior evaluations to parents and teachers, and made appropriate referrals. A speech therapist visited the center twice a week and worked with 20 children throughout the school year.

Objective 4: The center will provide an enriched variety of activities and exploration of natural phenomena.

This objective was attained.

Walnut Center classrooms had exhibits with live animals, reptiles, fish, and meal worms. Most classes explored plants and/or foods in their classrooms and on walking and bus tours of local neighborhoods and parks.

Teachers' trip lists for 1974-1975 included the University of Pennsylvania Museum and biology laboratories, a post office, markets, grocery stores, pet shops, an apple orchard, parks, playgrounds, and other museums.

Objective 5: Parents will participate in the activities of the project.

This objective was attained.

During all the evaluator's visits to the center, parents were observed working in the classrooms in supportive roles. All parents of prekindergarten and kindergarten children were required to give one morning or afternoon of volunteer service per month. Sign-in sheets corroborated that parents participated as intended. Parent sign-in sheets also revealed that some mothers with several children gave time to each child's classroom.

The child-care component received little parent involvement due to parents' working hours. However, two classes reported that two to five helpers participated regularly on a weekly basis, and several other parents gave sporadic help as their time permitted or classroom needs arose.

SUMMARY AND CONCLUSIONS

The Walnut Center provides formal schooling for preschool and first-grade pupils in a racially and socioeconomically mixed setting, part- and full-day care for community children, enrichment activities, and medical and social services.

The project was fully implemented despite the unexpected long-term illness of the center administrator. As evidenced by CAT and SESAT scores, the center attained its academic objectives by developing reading skills, reading-readiness skills for kindergarten pupils, and arithmetic skills for both kindergarten and first-grade pupils.

The center's other objectives also were met. There were excellent programs of speech therapy, medical, social service, and mental health care. Parent involvement, an integral part of the center's operation, helped provide a high adult/child ratio in the classrooms. Exploratory walks in the neighborhood, and trips to exhibits, nature centers, and museums expanded pupils' experiences from the classroom into the "real world" they observed.

The project represents a viable, proven model of early childhood urban education. Its pupils have achieved at a level superior to national norms and have received a breadth of experiences in a socioeconomically and racially mixed setting which they otherwise would not have had.

TABLE 1

NUMBER OF 63 WALNUT CENTER KINDERGARTEN PUPILS WITH SESAT SCORES IN VARIOUS NATIONAL PERCENTILE RANGES

National Percentile Range	Letters and Sounds	Aural Comprehension	Mathematics	Total*
Above 84th	19	16	16	18
50th-84th	34	26	26	29
16th-49th	9	17	17	15
Below 16th	1	4	4	1

*Includes Environmental subtest.

TABLE 2

MEAN ACHIEVEMENT OF WALNUT CENTER'S FIRST-GRADE PUPILS ON READING SECTIONS OF CAT-70

Item	Vocabulary	Comprehension	Total
Class 1			
Grade-Equivalent Score	2.7	2.5	2.7
National Percentile Rank	94	94	96
Class 2			
Grade-Equivalent Score	2.5	1.8	2.3
National Percentile Rank	91	72	87

TABLE 3

ACHIEVEMENT OF WALNUT CENTER'S FIRST-GRADE PUPILS ON MATHEMATICS SECTIONS OF CAT-70

Item	Computation	Concepts/Problems	Total
Class 1			
Grade-Equivalent Score	2.5	3.2	2.8
National Percentile Rank	92	97	96
Class 2			
Grade-Equivalent Score	2.3	2.6	2.5
National Percentile Rank	87	90	91

YOUNG AUDIENCES

The Young Audiences project presents programs by professional vocal, instrumental, and dance ensembles to pupils in target-area elementary and secondary schools.

RATIONALE

Pupils from Grades 1-12 in target areas need musical experiences like those provided by Young Audiences. They have few opportunities to gain an understanding of music in the cultural and ethnic sense. Also lacking is accessibility to a variety of musical instruments for learning performance skills. Young Audiences provides these necessary experiences.

EXPECTED OUTCOMES

Participating pupils are expected to gain an understanding of the properties of music and the production of sound through experimentation with various kinds of musical instruments. It is expected that children will be motivated to learn either vocal, instrumental, or dance skills.

MODE OF OPERATION

The project is designed to serve 76,170 public school pupils and 5,889 nonpublic school pupils in Grades 1-12 in 135 target-area schools.

Professional vocal, instrumental, and dance ensembles, chosen and trained in Young Audiences techniques by project advisers and directors, present programs in the designated Title I schools. Prior to their performances, printed vocabularies, repertoires, and brief descriptions of the ensembles are sent with confirmations to the schools. Information received by the schools is used as classroom preparation and reinforcement.

PREVIOUS FINDINGS

No previous findings are available because this was the project's first year of operation.

THE 1974-1975 EVALUATION

The current year's evaluation of the Young Audiences project focused on (*a*) the type of information received by schools prior to program presentations, (*b*) teachers' use of the information they received, (*c*) attendance and behavior of pupils, (d) the occurrence of follow-up activities, and (e) opinions of pupils and teachers regarding the programs. The evaluation team conducted on-site observations and interviews with both pupils and teachers.

IMPLEMENTATION

The project's intended mode of operation was fully implemented.

The evaluation team conducted nine observations in seven schools, using an observational checklist and randomly selecting programs for visitation. Twenty teachers and 54 pupils were interviewed.

A teacher accompanied each group of children to the auditorium performance in seven observations. The band teacher and the vice principal, who was the school's program coordinator, supervised the children in the two remaining observations. In five schools the principal was present for either the entire program or a portion. The music teacher was not always free to attend, but did so in four of the seven visited schools. Other school staff and teachers with no classes at the time of the scheduled program also attended.

Of the 54 pupils interviewed, 40 had been informed of the program on the morning of the presentation. Children were enthusiastic, attentive, and cooperative, and their behavior was judged "excellent" during six of the nine programs observed, and "good" during the other three.

All children interviewed liked the programs, and most expressed a special interest in the content and format. Favorable comments were made about the musical arrangements, variations, and explanations with demonstrations about historical musical backgrounds, and meaning and description of dances, costumes, and instruments.

Interviews with 20 teachers revealed that most received notification at least one week prior to the presentation. Fifteen of the teachers were notified by the principal. Starting in January, teachers were supplied with background information prior to the Young Audiences presentation, as expected. Follow-up activities, which included discussions, museum trips, map study, vocabulary study, research, and experimentation with songs and instruments, were planned by 16 of the 20 teachers.

All teachers interviewed agreed that children received benefits from Young Audiences performances. They felt that these programs created an awareness of styles of music other than contemporary, and of instruments not regularly encountered in their environment. Teachers also stated that the project allowed children to observe persons of different sexes and races working together. The target-area child was able to recognize parts of other cultures that have been incorporated in American music.

ATTAINMENT OF OBJECTIVES

Objective: To provide selected target-area children in Grades 1-12 with exposure to a 45-minute demonstration by performing artists, to aid them in understanding how music is created and to stimulate their desire to learn performance skills on instruments or in singing.

The objective was attained.

The Young Audiences project provided programs at least 45 minutes in duration for Title I children in elementary, junior high, and senior high schools. Artists performed individually or in combination with vocal, instrumental, and dance ensembles. To aid understanding, Young Audiences artists presented explanations and demonstrations. Clear background information was given in areas such as compositional development, musical styles, vocabulary, operatic scenes and arias, costumes, instruments, singers, and composers.

To stimulate the desire to learn performance skills, pupil participation was encouraged. Children had an opportunity to sing, dance, play instruments, and even direct the musicians onstage. Other children participated actively by singing, clapping, and marching.

Eighteen of 20 interviewed teachers felt that Young Audiences presentations provided exposure to cultural experiences their pupils might never receive otherwise. The programs presented basic information necessary for comprehension of styles such as jazz, opera, the blues, and dance. Some teachers responded further that prejudices were erased by the programs, and that Africans and their language, behavior, and dances were made meaningful to project children. Opera was also explained in a unique way to enable understanding by the primary-grade child. Teachers felt that Young Audiences encouraged children to take an interest in instruments, singing, and other phases of music education.

SUMMARY AND CONCLUSIONS

The Young Audiences project was designed to expose Title I children to unfamiliar musical experiences, performing artists, and instruments. The project's intended mode of operation was fully implemented in January; teachers received vocabulary lists and descriptive information about artists, instruments, and repertoires prior to programs.

The evaluators conducted structured observations, content analyses of programs, and pupil and teacher interviews. The project objective was attained; 45-minute presentations by vocal, instrumental, and dance ensembles were provided to children in Grades 1-12 in selected target-area schools. Pupils and teachers randomly selected for interviews reported favorable views of the project. Children expressed pleasure in participating actively with artists and their instruments, and felt their knowledge was increased by exposure to information presented in programs. Sixteen of 20 interviewed teachers, recognizing children's needs for information about unfamiliar styles of music and instruments, planned to schedule follow-up activities.

SUMMER COMPONENTS OF TITLE I ESEA PROJECTS

Evaluations of the summer components of Title I projects are reported consecutively in the following order:

- Affective Education
- Benchmark
- Bilingual Education
- Communications Experiences
- Comprehensive Reading Project:
  - District 1 Reading
  - District 2 Reading
  - District 3 Reading
  - District 4 Reading
  - District 5 Reading
  - District 6 Reading (No summer component in 1975)
  - District 7 Reading
  - Instructional Materials Centers
- Computer-Managed Instruction
- Counseling Services
- English to Speakers of Other Languages
- Follow Through
- Learning Centers
- Meet the Artist
- Motivation
- Multimedia Center
- School-Community Coordinator
- Walnut Center

Information regarding these summer components is presented substantially as the respective project administrators and/or district research associates responded to a six-item Summer Evaluation Summary form distributed to them by the Department of Federal Evaluation Resource Services:

1. Name of Project ______________________________
2. List the goals of the summer component of your project.
3. Describe the activities employed to attain these goals.
4. List which goals were attained and cite evidence to support your belief.
5. Describe the goals that were not attained and the reason why.
6. List programmatic changes and recommendations that will aid in the attainment of goals in future years.

AFFECTIVE EDUCATION
(Summer Component)

GOALS SET:

1. Submission of a plan which contains new materials, methods, and delivery systems pertaining to Resource Services for teachers by September 1, 1975.

2. Submission of new training designs and materials which will aid the teacher to use the Sharing Book and the Communications Network curricula by September 1, 1975.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

1. The Resource Services group held four days of meetings (July 2, 3, 10, and 11) to decide on a variety of policies and tasks.

2. Individual meetings were held by members of the group to work on specific tasks related to Goal 1.

3. The coordinator of Resource Services met with a number of system personnel to establish agreements for services with programs during the 1975-1976 school year.

4. The coordinator of Resource Services, the instructional materials assistant, and a trainer met and devised new systems and procedures for the use of materials and resources in the Affective Teacher Resource Center at Fifth and Luzerne Streets.

5. The instructional materials assistant completely catalogued the holdings of the Resource Center and established a new, controlled sign-out system.

6. The Setting Limits and Boundaries course was revised; the first six units were published.

7. The training designs for the Affective Training Group were revised and published.

8. New procedure was established and agreed upon for the processing and ordering of training requests by Title I schools throughout the system. A letter and a brochure to inform the principals of the new procedure were prepared for mailing in September.

9. Plans were established for the publication of four newsletters during the 1975-1976 school year.

10. Inputs from Communications Network teachers were used in the collection and preparation of teacher guides, project descriptions, and training designs.

GOALS ATTAINED:

1. Materials for training-group and teacher-training sessions were written, duplicated, and made ready for use during the 1975-1976 school year.

2. A letter announcing new procedure for scheduling school workshops was prepared and available for director approval and mailing in September.

3. Materials for parent training were deposited in a special section of the Resource Center and available for trainer and parent use.

4. Parent materials and rituals, readings, and designs were prepared for use with parents during the coming year.

5. The following Communications Network designs and materials have been produced: (a) teacher guidebook and prototypes for "Sharing Pages" projects; (b) synthesis of approaches for "Expanded Sentences" project; (c) listing of appropriate books for "Self-Directive Dramatization"; (d) training designs for two courses for parents.

GOALS NOT ATTAINED:

All were attained.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

Not necessary.

BENCHMARK
(Summer Component)

GOALS SET:

1. Implementation of a diagnostic-prescriptive approach to instruction.

2. Formulation of goals and specific objectives in content areas.

3. Formulation of a program for parental involvement.

4. Calendar of testing dates for the coming year.

5. Analysis of test results from last year.

6. Outline of future staff-development programs.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

1. Review of existing tests.

2. Development of new tests and an analysis of these for determining specific strengths and weaknesses.

3. Writing individual lessons and activities for the development of specific skills.

4. Development of charts for outlining specific strengths and weaknesses.

5. Writing of goals and objectives by teachers for practice.

6. Development and use of parental contact forms.

7. Discussions concerning group's needs.

GOALS ATTAINED:

All goals were attained. The tests will become part of the testing program and will assist in determining strengths and weaknesses of the children. The teachers performed the listed activities before the conclusion of staff development. They have the parental contact forms. They have a list of the testing dates. They have their test results and they did analyze them.

GOALS NOT ATTAINED:

None.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

None. Staff-development sessions were spent in definition, clarification, development of teachers' skills in meeting the goals and objectives of the Benchmark project.

BILINGUAL EDUCATION
(Summer Component)

GOALS SET:

To plan for the effective implementation of the project's activities for the 1975-1976 scholastic year. Areas of concern included evaluation, curriculum planning, in-service programs, and various administrative requirements such as handbooks, job expectations of the staff, cumulative records for students, revision of reports of pupil progress, and the organization of a parent-teacher group.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

Consultation with evaluators from the Office of Research and Evaluation; participation in a workshop for curriculum planning conducted by representatives from Research for Better Schools; communication with the Director of Foreign Languages Education regarding bilingual teacher criteria; review of available resources for staff development; consultation with the Assistant Superintendent of Schools in the Archdiocese of Philadelphia, principals, and the advocate for the Spanish-speaking community regarding student achievement.

GOALS ATTAINED:

Evaluation design; curriculum planning; drafting of handbooks for students and parents, and for teachers and teacher aides; drafting of cumulative record for students.

GOALS NOT ATTAINED:

In-service programs were not completed, pending confirmation by chairpersons. Formation of parent-teacher group was affected by the unavailability of parents and teachers during summer months. Job expectations of the staff need further discussion.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

The formation of a parent-teacher group should be proposed at the orientation program for parents in September.

COMMUNICATIONS EXPERIENCES
(Summer Component)

GOALS SET:

To introduce and develop media skills among elementary and secondary students in a nonschool environment.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

Using facilities of the Philadelphia Museum of Art, we worked with youngsters from Fairmount, North Philadelphia, and Spring Garden Community using cameras in exercises designed to improve perceptions as well as camera skills. With elementary aged students we used still photography in exercises led by secondary school interns in the mornings, who, in turn, learned motion picture skills in the afternoon.

GOALS ATTAINED:

That the goals were met was evidenced in the improved quality of the photographic technique over the course of the summer and by an increased ability to talk about what they were doing in their work. The secondary interns displayed in their discourse a very increased sensitivity to their own and others' learning processes.

GOALS NOT ATTAINED:

None.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

Not applicable.

DISTRICT 1 READING

(A Summer Component of the COMPREHENSIVE READING PROJECT)

GOALS SET:

To create and compile materials to provide resources for teachers that will enable them to initiate and develop specific language-arts and reading skills with their pupils, with a focus on newspapers to develop comprehension skills (with an emphasis on the Bicentennial).

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

Language-arts consultants under the leadership of the Elementary & Secondary Supervisor and direction of the Reading Project Manager (a) conducted research, gathering materials on newspapers, (b) selected appropriate format, (c) determined instructional strategies, and (d) wrote and edited documents.

GOALS ATTAINED:

A 74-page booklet for the elementary schools and a 67-page booklet for the secondary schools were produced for use such as for staff development within each school (although the original use for such booklets was to have been restricted to the Bicentennial Committee).

GOALS NOT ATTAINED:

None.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

The production of valuable curriculum materials such as the booklets points out the need for providing resources (time, money, personnel) during the summer for such curriculum development.

DISTRICT 2 READING
(A Summer Component of the COMPREHENSIVE READING PROJECT)

GOALS SET:

1. Analyze and summarize data for Title I regular objectives.
2. Complete item analysis of Forms A, B, and C.
3. Graph longitudinal CAT results.
4. Prepare materials for fall's informal testing program.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

The research assistant spent the entire summer working on the above projects under the supervision of the district research associate.

GOALS ATTAINED:

1. Nontechnical report written.
2. Item analyses completed.
3. Graphs prepared.
4. S&S packets made up for September testing.

GOALS NOT ATTAINED:

None.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

None.

DISTRICT 3 READING
(A Summer Component of the COMPREHENSIVE READING PROJECT)

GOALS SET:

1. To examine the results of the 1974-1975 reading project by studying data from administration of criterion- and norm-referenced tests and other available information.

2. To establish to what degree the 1974-1975 reading-project objectives were met.

3. To establish projected performance objectives in terms of scaled scores for individual grades in all district schools.

4. To prepare the following materials for the 1975-1976 school year based upon a study of the 1974-1975 results: books and supplies, District 3 elementary reading-teacher handbook (revision and updating), District 3 secondary reading-teacher handbook (revision and updating), and an appropriate administrative bulletin.

5. To clarify and arrange final details for start-of-year (1975-1976) staff-development programs.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

The Reading Project Manager, project secretary, and research assistant were retained for the summer months to work with the research associate and language-arts supervisors.

GOALS ATTAINED:

1. A detailed examination of the criterion- and norm-referenced tests administered during the 1974-1975 school year has taken place. Graphs have been produced. Significant information (school plans and school characteristics) concerning the 1974-1975 reading project, other than test data, has been examined.

2. The objectives of the 1974-1975 reading project have been examined and the degree to which they were met has been established and reported in a nontechnical report.

3. The elementary and secondary reading teacher handbooks and other appropriate start-of-year (1975-1976) bulletins have been prepared.

GOALS NOT ATTAINED:

1. Scaled scores were not used for individual school objectives. Instead, the percentage of improvements in different percentile ranks were used as similar objectives throughout the district.

2. Some books could not be ordered until the clarification of the Consent Decree.

3. Final arrangements could not be made until changes specified in the Consent Decree were incorporated into the planning.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

None.

DISTRICT 4 READING
(A Summer Component of the COMPREHENSIVE READING PROJECT)

GOALS SET:

1. To develop language-facility, word-recognition, and reading-comprehension skills by making books available to educationally and economically disadvantaged children.

2. To motivate children to read.

3. To strengthen skills learned in the reading program during the regular school year.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

Six hundred children were exposed to language-arts activities including filmstrips, films, story telling, books, magazines, and creative dramatics. The program for pupils in Grades 1-6 was located in five schools not served by public libraries (Duckrey, Heston, Lehigh, Leidy, Wright). The program's duration was four weeks.

GOALS ATTAINED:

The program's success was based on the average daily attendance at the centers as well as the number of books distributed to Title I pupils. A minimum of 600 children were reached and approximately 575 books were distributed.

GOALS NOT ATTAINED:

None.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

No changes are anticipated. The program was a success. It is recommended that the program continue in its present form.

DISTRICT 5 READING
(A Summer Component of the COMPREHENSIVE READING PROJECT)

GOALS SET:

1. Reduce and analyze data generated in the regular term.

2. Aid in the preparation of reports based on these data.

3. Plan activities for the 1975-1976 school year.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

1. Manually and by machine, computed, compiled, and statistically analyzed the collected formal and informal data.

2. Correlated the collected data with results of standardized tests.

3. Prepared and placed into functional format summarized data, tables, and graphs for use by the DRA and Reading Project Manager.

4. Attended and participated in planning meetings related to district's reading program for 1975-1976 school year.

GOALS ATTAINED:

All goals were attained.

GOALS NOT ATTAINED:

Not applicable.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

None.

DISTRICT 7 READING
(A Summer Component of the COMPREHENSIVE READING PROJECT)

GOALS SET:

1. Typing a hierarchy of skills for Language Arts consultants.

2. Typing the delegation of monitoring tasks and areas of responsibility for district personnel.

3. Typing CAT reading scores from computer sheets for initial school visits.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

Secretarial tasks such as typing, duplicating copies, and organizing distribution.

GOALS ATTAINED:

All three goals were attained. Evidence is the production of a staff-development program for consultants, a list of monitoring tasks and areas of responsibility for district reading personnel, and the individual school-grade summaries of the CAT scores to be used on initial school visits.

GOALS NOT ATTAINED:

Goals stated in Title I reading plan were actually written for the Reading Project Manager. All those in which the secretary participated were attained.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

None.

INSTRUCTIONAL MATERIALS CENTERS
(A Summer Component of the COMPREHENSIVE READING PROJECT)

GOALS SET:

To provide clerical support during the summer for planning, keeping records, and duplicating materials for the regular-term IMC project.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

Supervisors and the project manager developed plans for the coming year. The in-service program for all Title I LIMAs was set up, and bibliographies for the book displays were made.

Clerical staff updated personnel records, typed and duplicated bibliographies, typed plans for in-service program, typed job descriptions for elementary and secondary school Title I LIMAs, and typed letters to be sent to principals with Title I LIMAs describing program for 1975-1976.

GOALS ATTAINED:

Goals of the summer component have been achieved, as evidenced by the activities cited above.

GOALS NOT ATTAINED:

Not applicable.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

The same clerical activities will be necessary for the systematic implementation of the 1976-1977 Title I LIMA program.

COMPUTER-MANAGED INSTRUCTION
(Summer Component)

GOALS SET:

1. Develop a teachers' guide and index for all comprehension prescriptions (Levels 2-6).

2. Revise and replicate necessary student prescription booklets for Decoding Levels 2-9 and Comprehension Levels 2-6.

3. Write and/or revise skills and levels tests for Decoding Levels 2-10, and Comprehension Levels 2-4.

4. Correlate CAI with Philadelphia Reading Competencies and identify needed additional materials.

5. Rewrite scripts and rerecord audiotape cassettes for the 300 units in the primary-grade reading component.

6. Revise 720 content-area tests for the reinforcement centers to make them machine-scorable.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

Generally, activities included review of all instructional activities for each component, including diagnostic testing, prescription giving, and progress assessment. Based on this review, necessary materials were either developed or identified, or original materials were revised. The "new" materials were then typed, duplicated or printed, and assembled for distribution to the schools in September.

GOALS ATTAINED:

Goals 1, 2, 5, and 6 were fully attained, as evidenced by the actual materials available for distribution to the schools. Goals 3 and 4 were partially attained.

GOALS NOT ATTAINED:

In Goal 3 skills and levels tests for Levels 9-10, and in Goal 4 identification of additional instructional materials needed to complete the on-line CAI, will continue during the school year.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

Increased resources in terms of personnel would assist the staff in the ongoing tasks of program revision.

COUNSELING SERVICES

(Summer Component)

GOALS SET:

1. Provide psychodiagnostic testing and evaluation of academic, emotional, and social problems of referred children. The purpose of these diagnostic services was to provide accurate feedback and recommendations to parents and teachers regarding children's academic abilities and emotional functioning.

2. Provide psychological/psycho-educational service for those children found to be experiencing academic, emotional, or social problems. The services which any particular child received were to be based on the outcome of the diagnostic evaluation, but typically to involve (a) individual, group, or family counseling, (b) learning therapy, (c) individualized reading therapy, and/or (d) referral and placement.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

The clinics were generally family oriented. Psychodiagnostic evaluations permitted project staff to develop treatment goals for referred children and their families, and to make recommendations to teachers in the fall based on the child's assessed academic level and potential. In this manner, the CSP staff and teachers were able to collaboratively develop teaching strategies individualized for the referred child.

Individual, group, and family counseling services enabled the staff to therapeutically intervene in debilitating emotional or disruptive behavioral problems experienced by children which were interfering with their acquisition and utilization of academic skills. With the children who had already been seen by project staff during the school year, continued therapeutic services through the summer significantly diminished the lapses so often seen in children following long summer vacations. For the children who were seen for the first time during the summer clinic, valuable time was gained in therapeutically intervening in their problems, thereby reducing some of their problems before they began school in the fall.

After evaluation by project staff, some children who had been referred for academic problems were placed in a therapeutic tutorial program designed by CSP. Project staff trained groups of seventh and eighth graders to serve as tutors for younger children. Tutors met with their tutees several days a week for approximately an hour. In addition to individual supervision by CSP staff, the tutors met as a group once a week for guidance and direction.

Children with severe reading disabilities were seen individually by CSP staff in a program which combined counseling and reading-remediation techniques. In this program, attention was given initially to diagnosing the child's specific reading disabilities and reading level. Reading materials and methods were then introduced and specifically directed to the child's particular needs.

Children were referred to outside agencies when problems required specialized treatment. The summer clinics made it possible to identify the problems more quickly and remedial help was instituted earlier than would have been possible if they had waited for school to open in the fall.

GOALS ATTAINED:

A total of 658 children were referred to the 13 summer clinics. Of this number 532 (170 more than last summer) received psychological services during the six-week period. In all, 275 families received diagnostic feedback, recommendations, and/or counseling in a family context. Thus 729 persons (e.g., parents, siblings) other than the referred children were served by the CSP staff.

Psychodiagnostic testing and evaluation. Thirty-eight children received full psychological evaluations. These evaluations took a total of 107 sessions. In addition, 90 children received individual reading evaluations and 50 other children were given group readiness inventories. Thus 178 pupils received formal psychological or educational diagnostic testing. Because CSP used evaluative procedures other than formal testing as part of its diagnostic procedures, there were 232 pupil interviews, 239 educator interviews, and 339 parent interviews conducted during the summer as part of the evaluative process.

Psychological/psycho-educational services. Based on the findings of the diagnostic evaluations, 125 children were seen in individual counseling, 118 children were seen in group counseling, and 122 families and children were seen in family counseling.

Learning therapy was provided to 124 children through tutorial services directly administered by 65 older-age tutors. The tutoring was directed toward the child's specific area of difficulty but primarily covered reading and mathematics. Since many of the tutees suffered from psychological blocks to learning, the tutoring program also trained the 65 tutors in motivational skills to enhance the tutees' positive response to learning. The tutor-training sessions involved 249 tutor consultations conducted by CSP staff.

After individually-administered reading evaluations, 78 children received a total of 464 sessions of reading therapy directed toward their respective disabilities and reading levels.

When CSP found it could not provide the specific services needed by the child it referred the child to an appropriate agency. During the course of the summer 31 children were referred to health, educational, or social agencies.

Of the 532 children served directly by CSP over the summer, 67 were terminated because they were found not to need psychological services or because they moved, 168 were found to have improved to the point where they no longer required services, and 297 were identified as needing continued treatment in their schools in the fall.

GOALS NOT ATTAINED:

All goals set by the CSP for the summer clinics were met.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

No programmatic changes seem warranted at this time.

ENGLISH TO SPEAKERS OF OTHER LANGUAGES
(Summer Component)

GOALS SET:

1. To assess the competencies of students, whose native language is not English, who come to the ESOL Bicultural Intensive Learning Center from all areas of the city, in terms of their competencies in understanding, speaking, reading, and writing English.

2. To develop oral/aural skills in English, to improve reading comprehension in English, and to develop self-expression in English in written form.

3. To develop reading skills and basic arithmetic skills and concepts in Spanish.

4. To participate in learning about the history and culture of Puerto Rico as well as the other ethnic groups in the class.

5. To participate in field trips to the zoo, museums, and sites of historical importance in Philadelphia.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

The program was in operation from July 1 to July 31. Enrollment was expanded beyond the originally intended level of 200 students. Lunch was provided by the School District of Philadelphia. Since students from all over the city came to one school, busses were provided and older pupils were supplied with tokens.

1. The ESOL screening test was administered to 275 students to assess their competencies in understanding, speaking, reading, and writing English. Teacher evaluation of pupils is being included in the updated computer file to aid in their assignment to ESOL during the regular school year.

2. Bilingual teachers implemented specific activities to develop communications skills, with emphasis on comprehension and production of English speech. Instructional activities for older pupils also included reading and writing. Students were placed in groups according to language competency.

3. Daily activities designed to augment basic reading and arithmetic skills and concepts in Spanish were used.

4. In addition to the bicultural aspects of lessons, in which the heritages of different cultures were discussed, an ethnic assembly program was held. Parents attended the various activities of the program. Students learned about their ethnic background and that of others, and sang their respective national anthems.

5. Trips were taken to the park, zoo, libraries, and area museums.

GOALS ATTAINED:

All goals were attained, as evidenced by the active participation of students and their parents in all aspects of the program. Teachers were asked to evaluate pupils at the beginning and end of the program and reported progress in mastery of basic skills. Anecdotal reports indicated that some students who entered the program unable to communicate in English were able at the end of the month to understand and make themselves understood, even if at a minimal level.

GOALS NOT ATTAINED:

None.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

None.

FOLLOW THROUGH
(Summer Component)

GOALS SET:

1. To improve pupil performance in reading skills: it is expected that at least two thirds of the pupils will attain mastery of the skills selected for concentration.

2. To improve pupil performance in mathematics skills: it is expected that at least two thirds of the pupils will attain mastery of the skills selected for concentration.

3. To establish that classroom process during the summer adequately reflects the instructional approach characterizing each model.

4. To determine whether school staff consider all organizational and instructional support and assessment procedures to be adequate to meet their needs.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

Program activities. Each of six Follow Through models (Bank Street, Behavior Analysis, Bilingual, Educational Development Center, Florida Parent, and Philadelphia Process) employed within the six-week program its characteristic procedures. Two sessions were conducted daily: a morning session of strictly academic instruction focusing on reading and mathematics skills, and an afternoon session of instruction in arts and crafts, music, physical education, and excursions of both recreational and educational value.

Evaluation activities. The reading-skills component involved the administration of criterion-referenced reading tests developed by the Instructional Objectives Exchange (IOX) for both diagnosis and evaluation. Each test comprised five to 10 items and could be administered in about five or 10 minutes. Prior to the summer school program, evaluation and program staff had matched these tests with the Philadelphia Reading Competency Levels and listed them in order of difficulty within level. Summer-school teachers were instructed to pretest each child at the instructional level reported by the regular teacher, and to follow the sequence of tests in order of difficulty until three tests had been failed (i.e., less than 80% of the items were correctly answered). This would identify three skills with which the child needed help during the summer session. Posttesting was to determine whether each child had mastered these three skills.

The mathematics-skills component was evaluated by using major sections of the Philadelphia Mathematics Levels Test (PMLT). No pretest was necessary, since each child's instructional level was reported by the regular teacher at the beginning of summer school. The three major sections of the PMLT selected for testing were (I) Systems of Numeration, (II) Whole Numbers, and (III) Fractional Numbers.

To determine whether classroom process adequately reflected the instructional approach characterizing each model, it was originally hoped that the evaluation staff would use the Classroom Observation Routine (COR). However, time constraints and instrument revisions made this impossible. Instead, model liaisons provided information about this component.

The determination of organizational, supportive, and assessment adequacy was effected by an open-ended questionnaire distributed to summer-school staff.

GOALS ATTAINED:

Reading skills. For a variety of reasons (e.g., pupil absences, unrecorded pupil drops, and some confusion on the part of teachers over correct administration) the ideal pretest-posttest procedure was implemented in only 881 (60%) of the cases. For these pupils an average of 56% of the tests failed during the pretesting were mastered during the posttesting. In addition, data were available for 183 children (12%) who were given either one or two of the three required tests during both the pre- and posttest administrations. For these pupils an average of 51% of the tests correctly administered were mastered during the posttesting period. Thus for the 1,064 children who received either complete or partially correct test administrations, an average of 55% of the tests were mastered. This represents a 55% improvement in word-attack and reading-comprehension skills, which falls short of the two-thirds goal.

When the data are analyzed by model, results show that the Behavior Analysis Model obtained 59% mastery, the Bilingual and Philadelphia Process Models 58% mastery, and the Florida Parent, EDC, and Bank Street Models 56%, 52%, and 50% respectively.

Mathematics skills. Math-level data were available for 1,090 (78%) of the approximately 1,400 pupils who attended summer school. Lack of data was due to absences during the final week of summer school rather than to incorrect test administration, which was minimal.

For the 1,052 pupils who were tested at Levels I-VIII the data were analyzed by computing the percentage of students who mastered Systems of Numeration (Part I) and those who mastered the Rational Numbers System (a combined score for Parts II and III, since Part III did not have sufficient items at these levels to warrant a separate assessment). For the total program, 72% of the students tested at these levels mastered Part I, and 45% mastered Parts II and III combined. In addition, 43% mastered the total test (Parts I, II, and III).

Thirty-eight pupils were tested at Levels X-XIV. At these levels, Parts I, II, and III were analyzed separately since there was a sufficient number of items in each section. Sixty-six percent of the pupils mastered Part I, 32% Part II, and 38% Part III; only 17% mastered the total test.

In five of the six models, at least two thirds of the children mastered the skills in Part I; the exception was the Bilingual Model (63%). None of the models reached the two-thirds goal for the skills in Parts II and III.

Instructional approach. It was reported that at all six sites the instructional approach characterizing the respective models was implemented. Almost all the teachers were experienced in their particular model's approach and smaller classes than the regular year provided optimal conditions for individualized instruction. Model-specific curriculum materials, however, were not utilized; although this probably had little or no effect on the Florida Parent, Bank Street, and EDC Models, it might have provided for greater continuity in the Behavior Analysis, Bilingual, and Philadelphia Process Models.

Staff reaction. Postprogram questionnaires were given to the district liaison assistants at each site for distribution to summer-school staff. A total of 132 were returned. This represents a return of 83% for morning teachers, 72% for afternoon teachers, and 56% for classroom aides. Respondents were asked to identify (a) two things that hindered their work, (b) two things that helped, and (c) suggested changes. Questions were open-ended and were later coded by local evaluation staff.

The question on areas of hindrance involved different patterns of response among the three groups. Morning teachers most often identified the testing program and organizational problems (cited by 20% and 18% of respondents, respectively). Afternoon teachers often cited no problems. Their principal hindrance involved problems with materials (e.g., not enough music books), cited by 13% of the respondents. Classroom aides cited organizational problems most often (17%) and pupil problems next (12%, including class size, composition, and discipline).

The most frequently cited source of assistance for all three categories of respondents was helpful people (e.g., teacher, aide, district liaison assistant). This was mentioned by 49% of the morning teachers, 61% of the afternoon teachers, and 35% of the aides. Morning teachers also identified helpful materials (23%), and aides cited the pupils (18%) as helping them perform their roles.

For areas of suggested change, respondents in all three categories cited organizational changes (28% of the morning teachers, 32% of the afternoon teachers, and 35% of the aides). Morning teachers' most frequent suggestions involved more trips and special activities, and improvements to the physical conditions at the sites. Afternoon teachers suggested changes in program schedule. Aides suggested more trips and activities and changes in the program schedule. Beyond these changes, morning teachers cited changes in the testing program and afternoon teachers suggested modification of the salary schedule.

GOALS NOT ATTAINED:

1. An improvement of 55% in word-attack and reading-comprehension skills fell short of the two-thirds goal.

2. Fewer than two thirds of the pupils mastered the mathematics skills covered by the Rational Numbers System section of the Philadelphia Mathematics Levels Test.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

It is recommended that the use of model-specific curriculum materials be considered for future summer-school programs to ensure greater continuity. Although the testing program was conducted more smoothly than in the previous year, there is a need for program and evaluation staff to review possibilities for reducing the testing load. In addition, both program and evaluation staff may need to provide teachers with even more assistance to promote correct test administration and to focus instruction on those skills being assessed.

LEARNING CENTERS
(Summer Component)

GOALS SET:

1. Preparation of learning materials and teaching sequences for Title I schools.

2. Reorganization of program in light of new needs.

3. Evaluation of program.

4. Preparation of Teacher-Parent Center for maximum use in 1975-1976 by teachers, paraprofessionals, and parents.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

1. All reference materials in subject-matter areas (reading, language arts, mathematics, early childhood, cross-cultural, community studies, etc.) were organized and boxed into labeled kits for self-help reference and to facilitate staff use for workshops.

2. All writing of the project were put into notebooks for the years 1964-1975 to form an organized historical file.

3. Inventories were made of raw materials (Teacher-Parent Center) on hand and needed for fall. Teacher-producible learning aids (models) were repaired, redesigned, or discarded, depending on previous experiences with them.

4. Forms were prepared for staff replacements. New acting director was oriented to the project. (Director will be on sabbatical leave for 1975-1976.)

5. Planning meetings were held with various principals for changes of program in various school labs to emphasize even more basic skill remediation.

6. Teacher-Parent Center's daytime and after-school fall schedule was prepared. Fall newsletter which goes in September to Title I schools was printed.

GOALS ATTAINED:

All the above activities were accomplished, except that such things as processing staff replacement papers or reordering supplies and educational materials could not be completed until receipt of a decision in regard to Title I funds.

GOALS NOT ATTAINED:

The development of new materials took second place to a careful analysis and organization of materials the project developed over the last 10 years. This needed to be so in order to give a clear overview to the acting director in the absence of the director, and to get maximum use of materials developed for project schools.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

1. Extending the project's work in mathematics for the low achiever more extensively to the secondary school child.

2. Taking a lead in development of skills in writing.

3. Continuing and deepening the project's relationships with the Mathematics Resource-Teacher project, Benchmark, School-Community Coordinators, and Career Education.

MEET THE ARTIST
(Summer Component)

GOALS SET:

To provide educationally deprived children in Grades 5-12, who have been selected by school personnel as having art potential, with the following:

1. The opportunity of receiving an intensive art program for 105 hours during a seven-week summer session in an art center (Fleisher Art Memorial).

2. The opportunity of being exposed to a more in-depth study of art media than during the regular school year.

3. The opportunity of making cultural field visits on an average of once a week for the purpose of enriching the children's cultural and aesthetic knowledge and background and translating these experiences into a variety of art media.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

1. Teachers and leader kept close check on attendance. When students failed to appear, phone calls were made to their homes to ascertain reason for absence in order to assure a maximum attendance record.

2. Teachers planned and carried out activities in a systematic way to provide students with a variety of art activities and processes. Students went on field trips, made sketches, returned to their art studios, and developed sketches into drawings, paintings, and prints, which were then matted and put on display at a final exhibition.

3. Bussing was utilized to visit the zoo, the waterfront, the airport, and the Navy Yard. Walking trips to the Italian Market were also utilized.

GOALS ATTAINED:

Goal 1 was attained to approximately 80%. Total number of students enrolled was 129; retained, 109; dropped, 20. Retention rate was 84%. Of the 35 sessions, each student attended an average of 28. Average daily attendance rate was 80%.

Goal 2 was attained 100%. The students were exposed to 105 hours of instruction. Normally in a regular school year, students would receive 25 hours of instruction in Grades 5 and 6, 50 hours in Grades 7-9, and variable amounts (if any) in Grades 10-12.

Goal 3: The opportunity for field trips is severely limited in the regular school year because of the pressures of the other components of the curriculum. Therefore, the Fleisher special summer classes were able to provide trips and follow-up art experiences in a manner not possible during the regular school year.

GOALS NOT ATTAINED:

All goals attained.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

Continuation of program on a similar basis is recommended.

MOTIVATION
(Summer Component)

GOALS SET:

1. Students will improve English skills as measured by a teacher-constructed test administered on a pretest-posttest basis.

2. Students will improve basic algebra skills as measured by a teacher-constructed test administered on a pretest-posttest basis.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

One hundred sixty-seven incoming 10th-grade students attended classes at Temple University or the University of Pennsylvania. Students chosen were those incoming Motivation students most in need of remedial work in basic skills.

Students received a total of three hours of instruction in English and mathematics daily three days a week for four weeks. English classes emphasized drill work in fundamentals of grammar and usage, reading, and writing. Mathematics classes emphasized algebraic fundamentals, including signed numbers and equation solving.

Faculty in the project's summer component were teachers of the regular school term's Motivation project.

GOALS ATTAINED:

Goal 1 was attained. Students were tested on the first and last days of the project. Items on the test involved usage, business-letter writing, spelling, vocabulary skills, reading comprehension, and paragraph writing. The mean score on the pretest was 62; the mean score on the posttest was 72. A *t* test (for correlated data) indicated that the gain of 10 points was statistically significant at the .001 level.

Goal 2 was attained. Students were tested on the first and last days of the project. Items on the test involved elementary algebraic manipulations essential for high school mathematics study. The mean score on the pretest was 55; the mean score on the posttest was 75. A *t* test (for correlated data) indicated that the gain of 20 points was statistically significant at the .001 level.

GOALS NOT ATTAINED:

None.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

None.

MULTIMEDIA CENTER
(Summer Component)

GOALS SET:

To insure the efficient operation of the Multimedia Center for the 1975-1976 school year in providing audiovisual material to educationally deprived children.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

1. Accession new materials.

2. Republish and update Media Center catalogue.

3. Maintain and repair equipment and AV software after a year's use in the schools.

4. Prepare delivery schedules.

5. Prepare systems for circulation of materials.

6. Gather statistical data on usage of materials from the Center's records.

GOALS ATTAINED:

The goal cited above has been attained. A work list was composed by the project coordinator and all tasks were completed under her personal supervision.

GOALS NOT ATTAINED:

None.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

None.

SCHOOL-COMMUNITY COORDINATOR
(Summer Component)

GOALS SET:

1. To provide direct supervision to those school-community coordinators employed in the summer Head Start program.

2. To interview a sampling (a minimum of 45) of key School District and community leaders for the purpose of ascertaining their observations of the School-Community Coordinator project and their recommendations for improved performance.

3. To prepare a written assessment of the strengths of each school-community coordinator in the program to serve as a basis for strengthening each coordinator's performance in the coming year.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

1. On-site supervision by supervisors and director of coordinators involved in summer Head Start.

2. Meetings held with directors of summer Head Start and with Head Start center supervisors to assess the quality of work performed by coordinators working in Head Start.

3. Discussions with principals, key school administrators, and key community personnel to gain their input regarding the School-Community Coordinator project direction--with emphasis upon soliciting their ideas for program improvement.

4. Receiving of completed questionnaires left with the above personnel in which their reactions to the School-Community Coordinator project were detailed.

5. Detailed written assessments of the strengths of all coordinators were made in cooperation with the area coordinators who monitored the coordinators' activities.

GOALS ATTAINED:

1. Written evaluations for all coordinators were completed and reviewed; possible staff-development sessions were considered for the 1975-1976 school year.

2. All coordinators working in summer Head Start were observed and conferred-with at the various Head Start sites. Follow-up conferences with the Head Start directors, center supervisors, and school-community coordinators indicated coordinators' work was consistently of high caliber. Head Start directors submitted a letter stating satisfaction with coordinators' work.

GOALS NOT ATTAINED:

None.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

None.

WALNUT CENTER
(Summer Component)

GOALS SET:

The goals of the summer project were to provide an appropriate social and environmental atmosphere in which children could have an acceptance of self and others. The summer provided an experience of living in an unique combination of education, recreation, and creative activity. It provided an excellent opportunity for mental, physical, social, and spiritual growth. The goals more specifically were fun, adventure, outdoor education, human enrichment, making new friends, and helping parents.

ACTIVITIES EMPLOYED TO ATTAIN THE GOALS:

The various activities to attain the above goals were learning to cook outdoors and a two-week encampment spent learning the signs of the woods, feeling the wonder of the world to answer the desire for adventure and new experience. The summer provided an opportunity to learn to safely have fun in the water, and to use imagination to create and play new games. Other activities increased the youngsters' knowledge of animal and plant life.

GOALS ATTAINED:

All the goals outlined were met, as evidenced through the fact that the youngsters in the program had a happy and safe summer experience. The proof lies in the fact that they were curious about the new experiences available to them. They also began to develop more of a sense of independence in the relaxed, informally structured program of the summer which allowed them to develop even closer peer relations.

GOALS NOT ATTAINED:

None.

CHANGES SUGGESTED BY PROJECT ADMINISTRATOR:

None.

APPENDIX

PROJECT ADMINISTRATORS AND EVALUATORS

PROJECT ADMINISTRATORS AND EVALUATORS*

Evaluation Team	Project	Administrator
Frances Byers	Counseling Services	Albert Bell
Team Leader: Thomas Clark		
Thomas Clark	Computer-Managed Instruction	Sylvia Charp
Ethel K. Goldberg, Joseph Meade	Learning Centers	Lore Rasmussen
Ethel K. Goldberg	Episcopal Academy: Summer Enrichment	James W. Straub
Ethel K. Goldberg	Out-of-School Sequenced Science Experiences	Fred Hofkin
Joseph Meade, William F. Haggett*	Language Arts Reading Camps	Marjorie Farmer
Team Leader: Arnold Escourt		
Arnold Escourt, Rafe Colflesh	Benchmark	Edmund J. Forte
Arnold Escourt	Improvement of Reading Skills "A" and "B"	Marjorie Farmer
Rafe Colflesh	Enrichment Activities for Hearing-Impaired Pupils	Theresa Chletcos
Rafe Colflesh	Itinerant Hearing Service	Marechal-Neil Young

PROJECT ADMINISTRATORS AND EVALUATORS (Continued)

Evaluation Team	Project	Administrator
Lisbeth Sorkin	Communications Experiences	Jon Dunn
Lisbeth Sorkin	Education in World Affairs	Margaret Lonzetta
Lisbeth Sorkin	Walnut Center	Frances Becker
Stuart Hoffman	Motivation	Rebecca Segal
Team Leader: Marion Kaplan		
Marion Kaplan, Larry Aniloff, Carrolyn Iwamoto	Bilingual Education	Charles McLaughlin
Marion Kaplan, Larry Aniloff, Carrolyn Iwamoto	Reading Improvement through Teacher Education	Charles McLaughlin
Marion Kaplan, Larry Aniloff*	English as a Second Language--Readiness	Charles McLaughlin
Marion Kaplan, Larry Aniloff*	Improvement of Reading Skills "C"	Charles McLaughlin
Marion Kaplan, Larry Aniloff*	Primary Reading Skills Centers	Charles McLaughlin
Marion Kaplan, Carrolyn Iwamoto*	Multimedia Center	Charles McLaughlin
Marion Kaplan, Carrolyn Iwamoto*	Operation Individual	Charles McLaughlin

PROJECT ADMINISTRATORS AND EVALUATORS (Continued)

Evaluation Team	Project	Administrator
Marion Kaplan, Carrolyn Iwamoto*	Reading Enrichment and Development	Charles McLaughlin
Larry Aniloff	Summer Adventures in Learning	Charles McLaughlin
Team Leader: William Loue		
William Loue, Judith Green Leibovitz*	Creative Dramatics	Harriet Ehrlich
William Loue, Judith Green Leibovitz	Summer Reading Readiness	Charles McLaughlin
William Loue	Individualized Education Center	Charles McLaughlin
William Loue	Parent School Aides	Charles McLaughlin
William Loue	Speech and Hearing	Charles McLaughlin
William Loue	Speech-Therapy Clinics	Margaret Reilly
Judith Green Leibovitz	Institutions for Neglected and Delinquent Children	Lurlene Sweeting
Patricia B. Young	Affective Education	Norman Newberg

PROJECT ADMINISTRATORS AND EVALUATORS (Continued)

Evaluation Team	Project	Administrator
Thomas McNamara, Judith Goodwin, Anne Lukshus, Linda Matthews, James Welsh	Follow Through (ESEA Title I Component)	Leontine Scott
Team Leader: Robert Offenberg		
Robert Offenberg, Bob Epstein	English to Speakers of Other Languages	Eleanor Sandstrom
Team Leader: Louis Scheiner		
Louis Scheiner, John Ready, Fleta Waters	Classroom Aides	Leontine Scott
Louis Scheiner, John Ready, Fleta Waters	Kindergarten Aides	Frances Becker
Louis Scheiner, Fleta Waters	Instructional Materials Centers	Joan Myers
Louis Scheiner, Fleta Waters*	Meet the Artist	Jack Bookbinder
Louis Scheiner, Fleta Waters	School-Community Coordinator	George Green
Louis Scheiner, Fleta Waters*	Young Audiences	Edwin Heilakka
Camilla Grigsby	Summer Special Education	Marechal Neil Young

PROJECT ADMINISTRATORS AND EVALUATORS (Continued)

Evaluation Team	Project	Administrator
Joseph Wroblewski	Comprehensive Mathematics	Alexander Tobin
Jay Yanoff	Intensive Learning Center	James H. Lytle
Jay Yanoff	Pennsylvania Advancement School	James H. Lytle
Roger J. Fishman, B. David Wasserman*	Alternative Programs	Leonard Finkelstein
Joseph Gavin, Cora Coleman	District 6 Reading	Norman Kline
Charles Howard, Nicholas Rongione, Judith Zernik	District 1 Reading	Verneta Harvey
Charles Howard, Mark Raivetz, Nicholas Rongione	District 4 Reading	Katherine C. Jackson
James Scheib, James Comerford, John McKinney	District 2 Reading	Michael Iannelli
James Scheib, Brenda Cohen, John McKinney	District 3 Reading	Arthur N. Romanelli
Alan Solomon, Jay Rosemoff, Joseph Wroblewski	District 5 Reading	Irving Rosen

PROJECT ADMINISTRATORS AND EVALUATORS (Continued)

Evaluation Team	Project	Administrator
Alan Solomon, Cora Coleman	District 7 Reading	Reeda Kravinsky

*Projects generally were assigned to evaluation teams under the leadership of research associates. An asterisk following a person's name indicates that major responsibility within the team was assigned to that person.